NOV 3 1924

Marine Review

Registered U. S. Patent Office

THE BUSINESS OF TRANSPORTATION BY WATER

NEW YORK CLEVELAND LONDON

Published Monthly
Vol. 54, No. 11

NOVEMBER, 1924

$3.00 a Year
35c a Copy

LEVIATHANS OF THE GREAT LAKES SAFEGUARDED BY NACO ANCHOR CHAIN CABLE

It is significant that the Detroit and Cleveland Navigation Company specified NACO Anchor Chain for their new boats, — "GREATER DETROIT" and "GREATER BUFFALO".

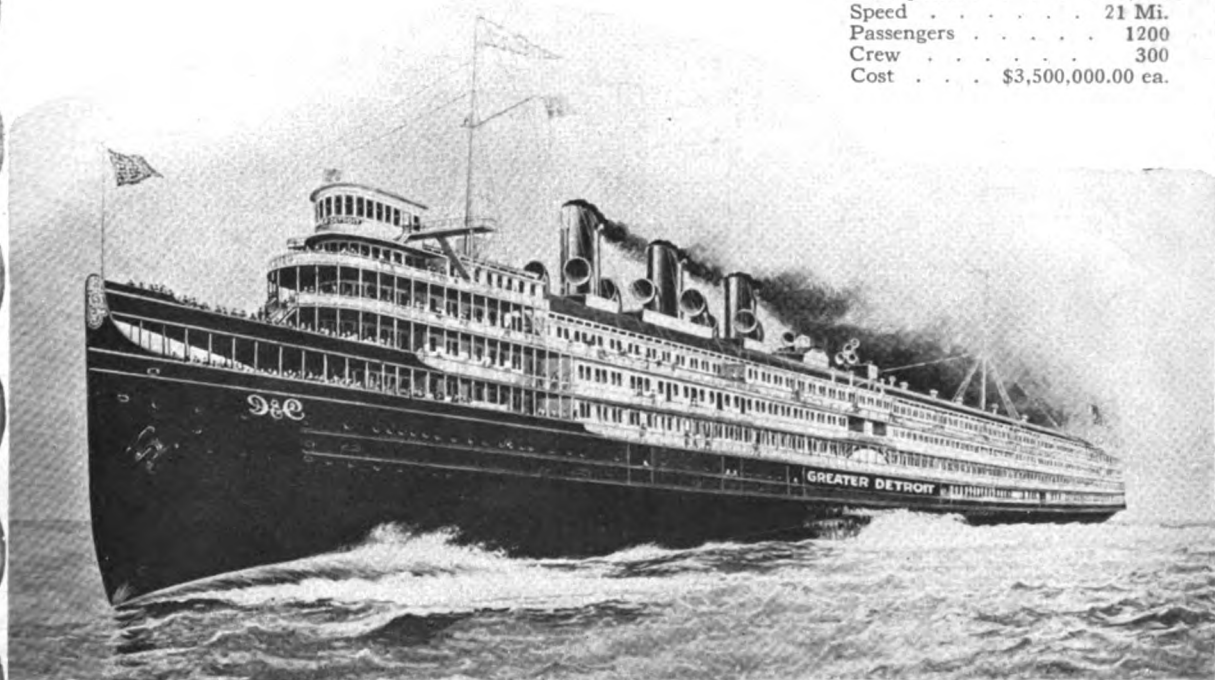
The lives of thousands of passengers in their keeping demand the use of the strongest and most reliable anchor chain obtainable,— anything else,— any substitute,— any chain that merely passes the test specifications would not be "safe enough".

NACO CHAIN

is the strongest Anchor Chain made. Every shot is proof tested to the breaking load of the best grade of wrought chain.

"GREATER BUFFALO" and "GREATER DETROIT"

Length	550 ft.
Width	100 ft.
Draught	16 ft.
Tonnage	4500
Horsepower	12,000
Speed	21 Mi.
Passengers	1200
Crew	300
Cost	$3,500,000.00 ea.



NATIONAL MALLEABLE AND STEEL CASTINGS CO.

10600 QUINCY AVE. CLEVELAND, O.

Generated on 2024-07-26 06:13 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Why a Vice-President?

THE CONGRESS of the United States wisely established a line of successors to the President. The first in this line is the Vice-President; next the Secretary of State; then the Secretary of the Treasury; and so on. In over one hundred years this reserve has been called upon only a few times, and yet it has given our government a stability not otherwise obtainable.

If you contract with Linde for your oxygen, you probably will always receive your supply from the same plant or the same warehouse. But if anything should happen to this plant or warehouse, or if demand should exceed supply, then Linde has a line of 115 successors—115 plants and warehouses ready to step in and carry the load.

THE LINDE AIR PRODUCTS COMPANY
General Offices: Carbide & Carbon Bldg.
30 East 42d Street, New York
38 PLANTS — 77 WAREHOUSES

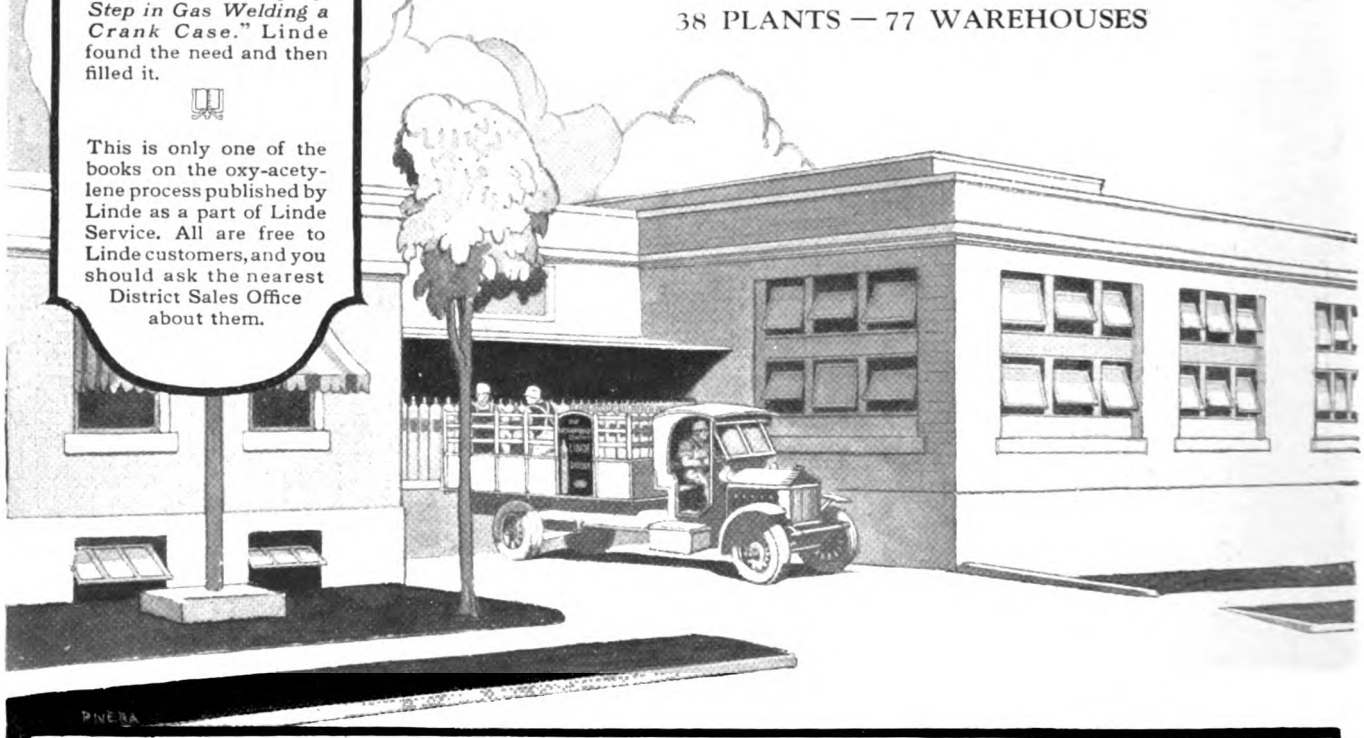
The "Why" of Linde Books

Linde Books are written and published by the Linde Company for one reason only: to supply definite needs of Linde customers.

During the past year one of the representatives of the Linde Company has been calling upon welding shops and wayside garages to discover what the Linde Company could do to help these customers.

As a result of this, Linde has written and published a book called "*Step by Step in Gas Welding a Crank Case.*" Linde found the need and then filled it.

This is only one of the books on the oxy-acetylene process published by Linde as a part of Linde Service. All are free to Linde customers, and you should ask the nearest District Sales Office about them.



LINDE OXYGEN

YOU CAN DEPEND ON THE LINDE COMPANY

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-07-26 06:13 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Shipping board freighter loading tin plate at Cardiff, Wales. Private American ships cannot compete with the government treasury and a vigorous effort should be made by private owners to destroy the menace of government ownership

Marine Review

November 1924

"When the Government Goes Into Business"

EVENTUALLY either the government must take over the entire shipping of the United States engaged in foreign commerce or get out of the shipping business completely. The existing half-and-half condition of affairs, with the United States government competing with privately owned steamships, is intolerable. Either the shipping board must be reduced to its original function of supervising ocean transportation or the privately owned American ship will disappear from the high seas. No corporation or individual that has to pay taxes can compete with the government which uses taxation to support commercial enterprise.

President Coolidge himself exposed the fallacies in our merchant marine policy in a recent speech at Washington in which he said:

> "When the government goes into business, it lays a tax on everybody else in that business and uses the money that it collects from its competitors to establish a monopoly and drive them out of business. When the government really starts in a line of business it closes that line to the people. It has been an American ideal that the door of opportunity should remain open."

If the present administration remains in power, it will be interesting to observe to what extent the operations of the shipping board and the Emergency Fleet corporation are brought into line with the President's expressed policies.

The danger which lies in continued government ownership and operation is clearly indicated by the experience which the owners of tugs in New York harbor are now going through. Not satisfied with its masterly inactive fleet of ocean liners, the shipping board some time ago went into the towing business in New York in competition with privately owned tugs. In response to repeated protest by the New York Tow Boat exchange. Admiral Palmer, head of the Emergency Fleet corporation, agreed early last summer that the government's tugs would be withdrawn. Summer has passed into autumn and winter is at hand with the government's tugs still in operation in competition with vessels owned by tax paying citizens of New York. It would be safe to predict that unless the New York Tow Boat exchange is successful in its efforts to get the government tugs out of New York harbor, it will not be long before similar government-owned small craft will be operating in competition with private concerns in all of the principal harbors of the country.

Government ownership and operation of public utilities leads inevitably to government ownership and operation of purely private enterprises. It is for this reason that MARINE REVIEW believes the shipping board should be forbidden to own and operate steamships and that the fleet it now has on hand, most of which is obsolete, should be sold off at public auction as fast as possible to all comers for what it will bring.

Generated on 2024-07-26 06:13 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Steamer SUHOLCO, caught with 31 sister ships in the post war depression and threatened with a long term of idleness, coming into Port Newark with a full cargo of lumber after her owners had solved the task of finding a profitable trade route

Finds Work for Idle Fleet

NEW YORK, the metropolis of the western hemisphere and the greatest port in the world, is favored by a wonderful natural harbor and an extensive waterfront on deep water. Inherent in the very character of the natural advantages, however, lies a weakness which has long been felt and which is now a serious menace to the growth and even to the maintenance of New York's present pre-eminence, unless steps are taken to relieve the situation.

To reach this major gateway for the shipment and receipt of the products of commerce with all the world, the largest rail systems of the country naturally converge on New York and get as near to the heart (Manhattan island) as natural restrictions will permit. Separated as Manhattan island is by barriers of water and in itself of a limited area thoroughly congested by the life and activities of a large population, these railroads have been forced to locate their terminals for the most part on the mainland in New Jersey. The greater part of the shipping by water is done from piers on Manhattan and the Brooklyn waterfront and consequently it is necessary to connect the main line rail terminals with the ships lying at these piers, by a vast system of lighterage, both from rail to ships and *vice versa*. When it is considered that the population of the metropolitan district alone is more than 6,000,000, three-quarters of the entire population of Canada for instance, and recalling the tremendous home production and consumption of so large a body, it is economically overtaxing excellent natural advantages also to try to ship and receive the greater part of the products destined for other places in this country and to foreign countries from this same narrow congested bit of land.

These intolerable conditions of today are the results of the continuation and expansion of a system sufficiently practical and workable years ago when the volume of trade and population was comparatively small, but this system is now entirely inadequate, economically unsound and the direct cause of congestion.

Unless some relief is sought in economical methods suitable to unlimited growth, shipments will be forced away from the port of New York to seek outlet and ingress at other ports. Custom and tradition and the great physical properties and organizations which have grown up around the present system are forces of tremendous power opposed to any change. The Port of New York Authority, a joint commission of the states of New York and New Jersey is the agency which must represent the intelligent will of the people in directing, initiating, leading the way and co-ordinating clashing private interests in a gradual adoption of a reasoned, practical, and economically sound solution of this extremely important, complicated and vexing problem, so that New York will be able properly to receive and accommodate the vast volume of goods which pass through.

Solving a Problem

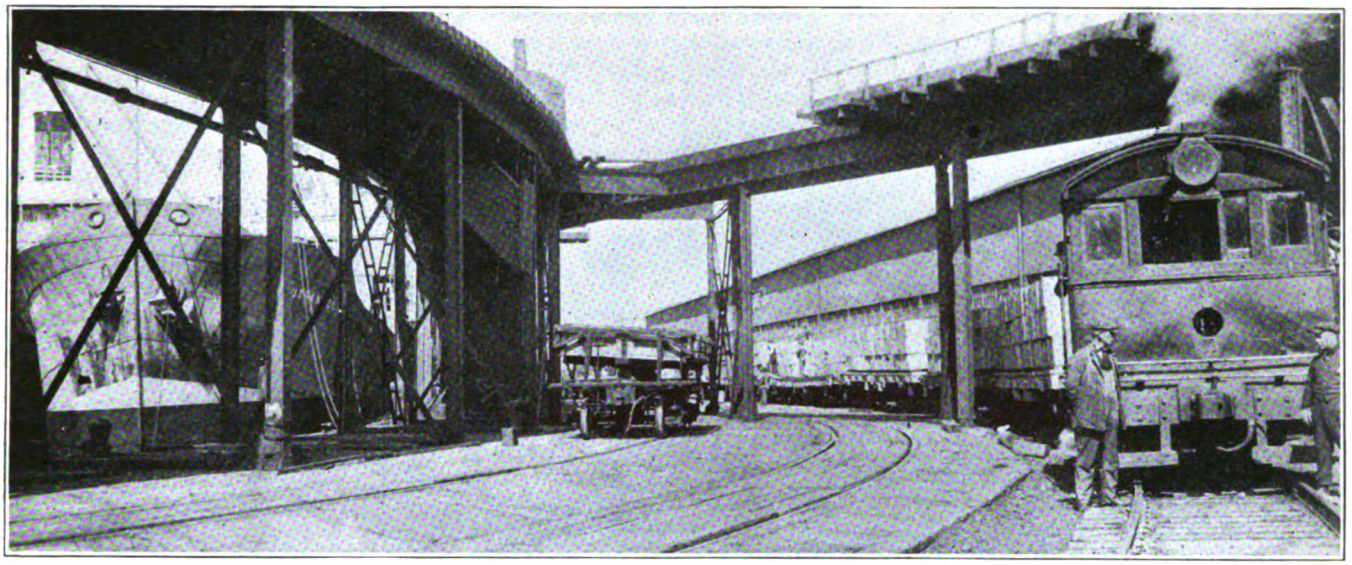
Individual shipping enterprises can help out in the solution of this problem by utilizing as terminals, waterfront property in close proximity to the main line rail terminals, where goods in transit may be moved directly from ship to rail or rail to ship and by this much save the time and expense of lighterage and relieve the congestion on the piers in the port proper. This is what the Transmarine Lines are doing in operating some 19 vessels in Gulf and West Coast services out of Port Newark.

A brief review of the events leading up to the organization of these lines should be of interest and will show strong economic reasons for the utilization of this particular location. When the shipbuilding facilities of the country were taxed beyond limit to meet the demands of the war it was soon recognized that it would be necessary to go to mass production or fabrication of ships, in order to obtain them quickly and in sufficiently great number. The Submarine Boat Corp., having with notable success applied methods of fabrication or mass production to submarine chasers, offered to undertake the building of standardized steel cargo ships using similar methods. A contract to build 150 standardized steel steam cargo vessels was awarded to this company.

In looking about for an ideal location for an assembling and erecting shipyard, Port Newark situated on the west shore of Newark bay and less than eight miles from New York bay, was chosen. A consideration of primary importance in this choice was the fully equipped, direct rail transportation facilities enjoyed by this site, served by the Pennsylvania, Central Railroad of New Jersey and Lehigh Valley railroads and through these systems with all of the principal trunk lines of the country.

In developing this property of over 130 acres to the highest possible point of efficiency for the purpose intended, there was constructed at this site a railroad with 26 miles of track equipped with its own rolling stock and locomotives and classification yard, and connecting with the main trunk lines, of a capacity to handle 1000 carloads of freight daily, a dock 4000 feet in length with three sets of railroad tracks and an overhead crane system along its full length with electric and steam cranes of from 60 to 90-foot outreach sufficient to reach from beyond ship's hatch on one

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



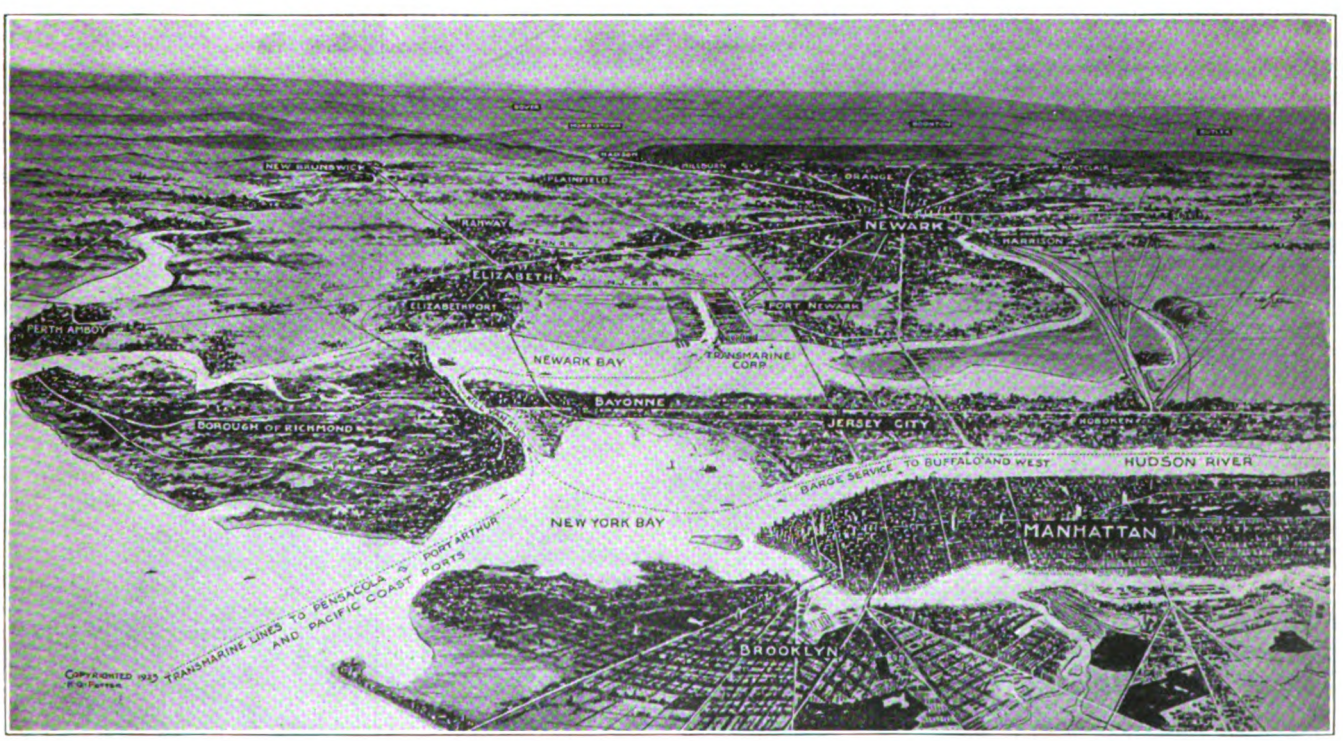
FREIGHT HANDLING COSTS ARE HELD TO A MINIMUM AT PORT NEWARK TERMINAL. OVERHEAD CRANES FORM A QUICK AND INEXPENSIVE LINK BETWEEN FREIGHT CAR AND SHIP'S HOLD

side to all three tracks and beyond, on the other side. Also a powerful gantry crane of 70-ton capacity was installed. On the inshore side, warehouses were built covering approximately 50 per cent of the length of the dock. Steam cranes were supplied for service in the storage yards.

Of the original contract of 150 vessels, 118 were completed and delivered to the government. Through negotiations with the Emergency Fleet corporation, the Submarine Boat Corp. came into possession of the materials for the remaining 32 ships. Of these ships, 31 were completed for builders' account by 1921, on the prospect of selling them. At this juncture, the Transmarine Corp. was formed. During 1923, the last of the 32 vessels, the SUPHENCO, was completed as a motorship. A complete list of the names of these ships will be found in the table on page 421.

Enters Shipping Business

By this time, the bottom had dropped out of the ship market and the ships could not be sold short of a complete sacrifice. Throughout the remainder of 1921 and the first half of 1922, a few of these ships were placed in the Havana, Cuba, trade and in carrying European coal and cargo for the Russian Relief, a sort of tramping business. With an oversupply of ships and shipping business at a low point, the owners were finally faced with the alternatives of selling the vessels at whatever they would bring, laying them up, or operating them on their own account in some definite service. The latter course was adopted and in August, 1922, a regular fortnightly service to Pensacola, Fla., was inaugurated. In December, 1922, the ports of call on the gulf were extended to include Pensacola and Port Arthur, Tex. In June, 1923, with the sailing of the SURAILCO with a full cargo



BIRDSEYE VIEW OF THE PORT OF GREATER NEW YORK SHOWING THE CONVENIENT LOCATION OF PORT NEWARK TERMINAL AND THE CHANNELS FOLLOWED BY THE TRANSMARINE LINES TO PACIFIC, GULF OF MEXICO AND GREAT LAKES PORTS

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

the service from Port Newark to Los Angeles, San Francisco and northern West Coast ports, was inaugurated. On July 12, 1923, the gulf service was made weekly to accommodate increased business.

These two services employing 13 ships in the intercoastal trade and 6 in the gulf trade are now in profitable operation. The present schedule calls for two steamers always on berth loading at Port Newark terminal, one bound for Beaumont, Tex., and one bound for Los Angeles and San Francisco. Sailings in each service are maintained on a weekly schedule, though this time interval may be lengthened or shortened as demands for space may dictate. On the return voyages in the West Coast service, the steamers go to northwest lumber ports such as Coos Bay, Willapa Harbor and Grays Harbor for full cargoes of lumber (2,500,000 board feet). Return voyages in the gulf service are made via Mobile, Ala., and Pensacola.

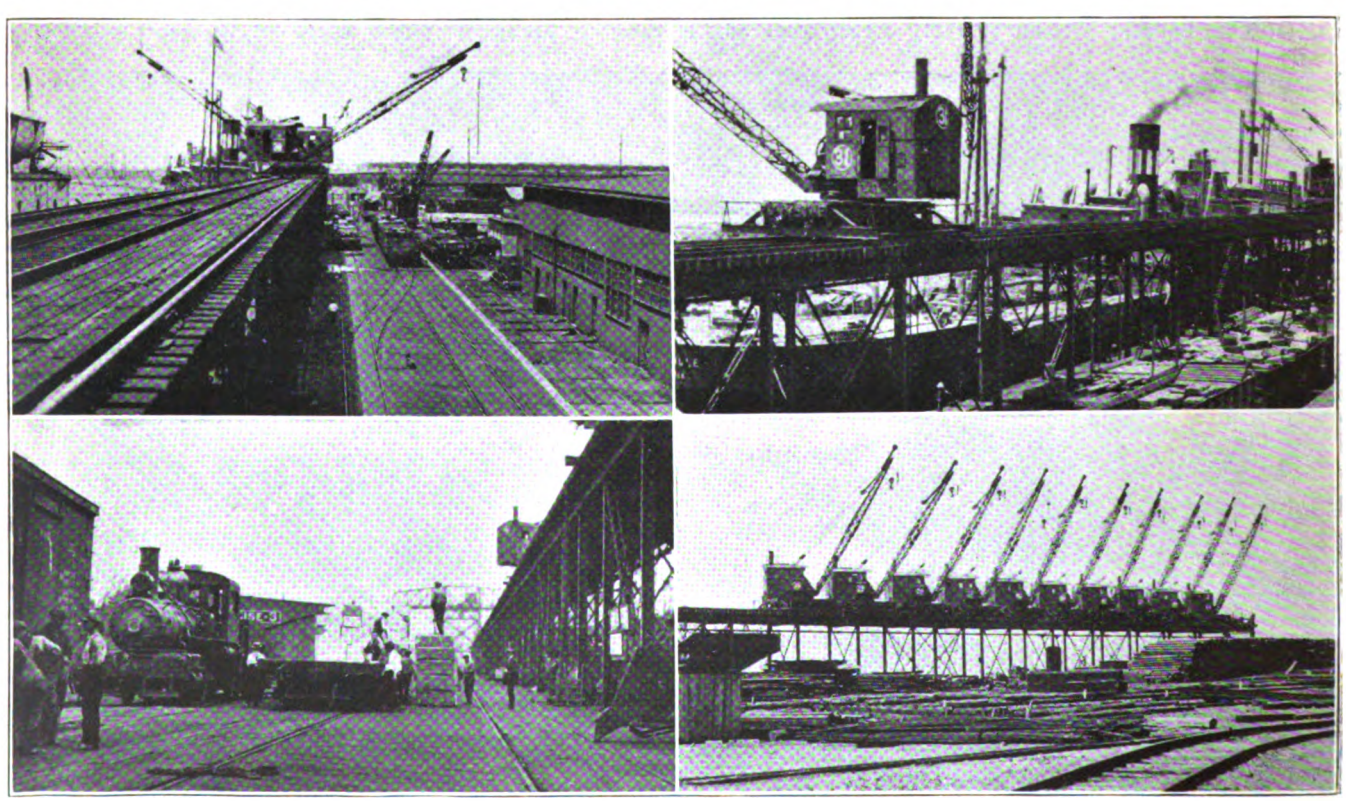
Controls Docks and Ships

Possessing at the end of war activities, as pointed out above, a strategically situated railroad and steamship terminal fully and efficiently equipped connected with New York harbor by a channel with 30 feet of water at mean low tide, 32 identical A-1 cargo vessels all ready to go to sea on immediate notice, the owners accepted the challenge of circumstances and under the Transmarine Corp. entered the shipping business. Besides the steamship services, a regular service between New York and Buffalo over the New York State barge canal, connecting with Great Lakes steamship lines was also inaugurated. For this service, 30 steel barges and 5 diesel tow boats were especially designed and built and are in use. It may be said without exaggeration now, that this enterprise is solidly established and in successful operation, that it has been an especially useful adaptation of war activity to peaceful pursuits. It is a fine example of beating swords into plow shares.

But sentiment and the will to do is not sufficient for success if headed in the wrong direction. A little study of the situation will show that this line has under its own control all the elements which enter into successful operation of a transportation system. Its exceptionally good port and terminal for ship and rail as far as all physical characteristics are concerned is located in the heart of the great industrial section of northern New Jersey and at the center of a population of 10,000,000 people. Direct contact is made with three large rail systems and through these with all the most important rail systems of the country. It has its own terminal railway, the Atlantic Port Railway, and a large fleet of modern ships. Goods coming in by ship can be unloaded directly from cars to ship and goods coming in by ship can be loaded directly from ship to cars. In this way, goods do not need to be stored in sheds and may be on the way to destinations at once, without the expense and delay of extra handling and shifting. Bulk shipments that have been kept away from New York on account of the expense may move through this terminal without delay or hindrance and at the lowest cost. The average New York pier is approximately 800 feet long and 100 feet wide and can accommodate only 10 per cent of the cargo of the average vessel. The rest must be handled by lighter. The Port Newark terminal of the Transmarine Lines has dockage space of 4000 feet and 132 acres of unlimited warehouse and storage space. The overhead crane system is superior both practically and economically to ship's gear for loading and discharging. The services of its own tugboats, five diesel and two steam, and a fleet of six lighters are available.

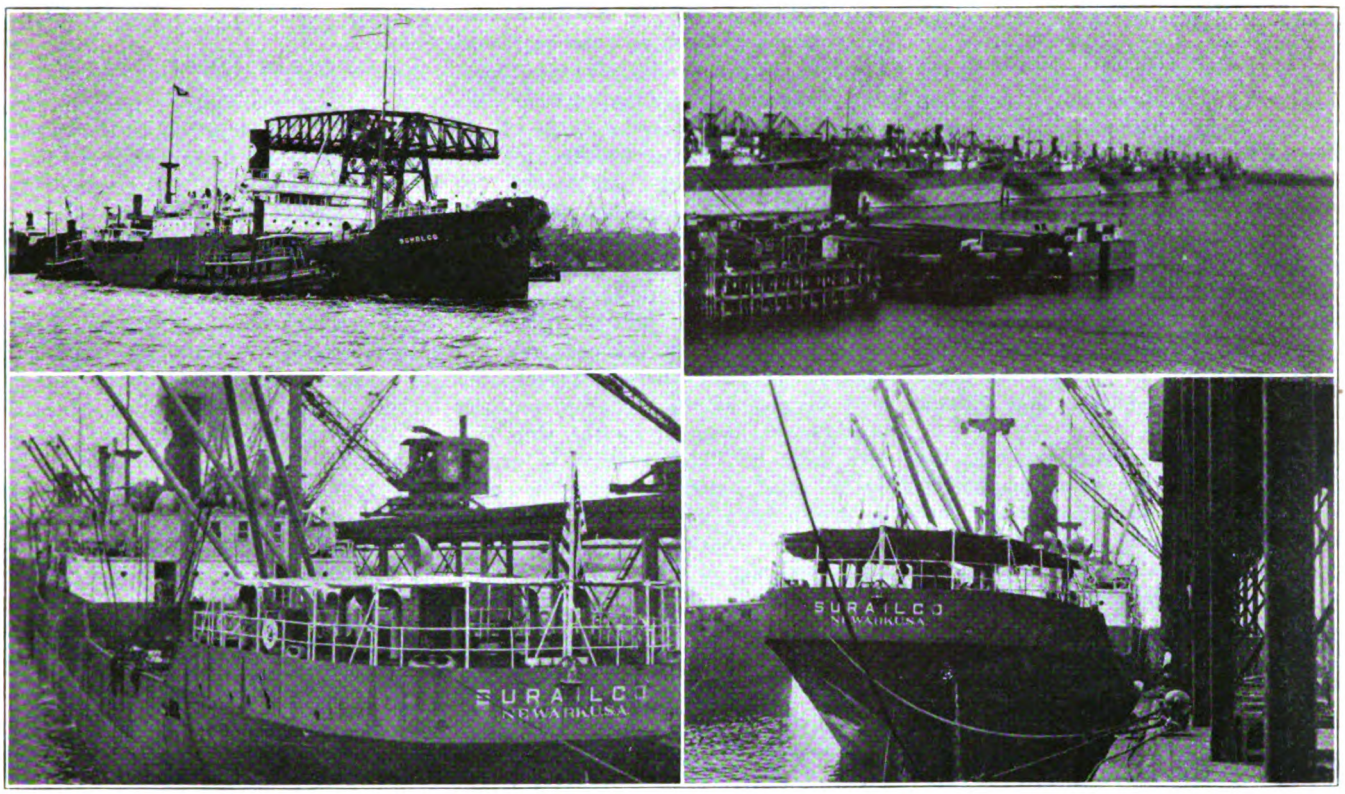
Save by Quick Handling

As a direct appeal to shippers, cargo can be received from connecting railway lines at the neck of the bottle of congestion just outside of Jersey City, Hoboken, Weehawken, etc., and thus by avoiding this congested area can save compared with New York from 2 to 10 days in moving freight from point of shipment to alongside of steamer. This saving in time represents a tremendous saving in interest alone to shippers. In the movement of copper for instance, the shipper stands to lose 5 cents per ton



HANDLING EQUIPMENT AT THE TERMINAL IS REMARKABLY COMPLETE. UPPER VIEWS SHOW HOW CARGO IS HANDLED DIRECTLY BETWEEN RAILROAD CAR OR WAREHOUSE AND SHIP. A BATTERY OF THESE CRANES AND A YARD SCENE ARE SHOWN BELOW

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



LOWER VIEWS SHOW STEAMER LOADING AT PORT NEWARK TERMINAL FOR PACIFIC PORTS. UPPER LEFT VIEW SHOWS INCOMING STEAMER CARRYING PACIFIC LUMBER WHILE CANAL BARGES AND SOME OF THE AVAILABLE SHIPS OF THE TRANSMARINE LINE ARE SHOWN AT THE RIGHT

per day. To be sure, the transportation lines have to make good this allowance but with the result that they are not anxious for this kind of freight.

The railroads would save operating cost if they could deliver directly from car to ship. On their own admission, it costs them not less than $2 per ton to lighter freight from Jersey terminals to alongside steamers in New York harbor, not to mention the vast capital outlay in floating equipment and the maintenance of a large organization for classifying and spotting cars when permits for disposition are issued nor the labor problems involved in unloading the vast volume of traffic that moves through their terminals. Cost is reduced to a minumum by being able to offer these direct advantages to the shippers and the railroads and by congregating entire cargoes at one port under one complete control. Risk of loss, damage and pilferage are also greatly reduced by bringing carload freight directly alongside steamer and so avoiding rehandling from rail to lighter.

One result which has already been accomplished by the practical operation of the Transmarine Lines is the recognition which the Port Newark terminal has received from all the trunk railroads. They are now convinced that this terminal is economical for loading ships. When it is considered that goods from as far west as Chicago come east to go west by water, it is easy to imagine the terrific congestion that will result when foreign trade increases with better conditions abroad. The lighterage problem for the railroads will then assume gigantic proportions and will completely overtax the facilities both in equipment and terminal space. This again is indicative of the fact that quantity production has been efficiently solved in the United States at least, but the problem of distribution still remains to be solved. The location, and the equipment used and methods pursued at the Port Newark terminal of the Transmarine Lines, is a practical step along the right direction.

Take a specific instance of uneconomical movement of freight. The cost to railroads of the present methods of lighterage of lumber exceeds the entire line haul revenue. In other words, by the time the lumber is delivered alongside its terminal by lighter, the railroad has spent more for this service than it has received for the transportation to destination and consequently receives less than nothing for the line haul. Furthermore, lumber also congests the terminals owing to limited facilities and physical inability to expand. This expense and trouble can be eliminated by shipping lumber not destined for local consumption in Manhattan or Brooklyn via a terminal in direct contact with the principal rail lines such as Port Newark.

Though engaged in the shipping business themselves, the extent of the Port Newark company's facilities are so great that only a comparatively small part is in use and the ships of other lines can use this terminal.

The accompanying illustrations show clearly the location of the terminal and the equipment and facilities for loading and discharging. All of the 32 ships are being kept up in an excellent state of repair and up to Oct. 1 have all been to sea. In this way, by rotating them in service they are maintained in better shape than if laid up. They have been regularly drydocked and subjected to periodical surveys by the American Bureau of Shipping representatives. A number of them have had their first 4-year special survey.

Fleet of 32 Ships Put to Work

FLEET 5350 D. W. TONS—AMERICAN STEAMERS

SUBOATCO	SUNEWCO
SUCARSECO	SUNUGENTCO
SUCUBACO	SUPHENCO*
SUDAWSONCO	SUPORTCO
SUDUFFCO	SURAILCO
SUDURCO	SUREMICO
SUEDCO	SURICO
SUELCO	SURICHCO
SUGILLENCO	SUSCOLANCO
SUHOLCO	SU-HERICO
SUJAMECO	SUSPEARCO
SUJERSEYCO	SUTERMCO
SULANIERCO	SUTORPCO
SUMANCO	SUTRANSCO
SUNELSECO	SUWARINCO
SUNEWARKCO	SUWORDENCO

*Motor vessel.

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Earth Inductor Compass Found Useful at Sea

Marked advantages over the usual types of ships' magnetic compasses are claimed for the earth inductor compass invented at the bureau of standards, department of commerce. During a recent sea test it was found to be free from roll and pitch error to such an extent that it remained steady under conditions which caused the ship's compass to oscillate 2 or 3 degrees. When a sudden change of course was made the indicator moved freely and without oscillation.

It has a further advantage that the parts affected by the ship's magnetism can be placed in that part of the ship in which they will be least affected, up at the mast head if desired. The indicating instrument is unaffected by the ship's magnetism and can be placed at any convenient point. The two parts are connected by ordinary wires. This compass is the invention of Dr. L. J. Briggs and Dr. Paul R. Heyl of the bureau of standards, and for its invention they were awarded the Magellan gold medal. It takes advantage of the fact that the voltage of a direct current dynamo is changed by changing the angle between the field and the brushes. In the compass, the earth's magnetic field replaces the field magnet of the dynamo, and the brushes are mounted on the ship and turn with it. The armature is driven by a small, electric motor or may be driven by a wind wheel. This type of compass has already been tried out successfully in airplanes.

German Merchant Fleet Totals 1300 Ships

At present the German merchant marine totals 1300 vessels of 2,600,000 gross tons. The principal owners are: Hamburg-American Line, 60 vessels of 335,779 gross tons; North German Lloyd, 37, of 274,139; Hugo Stinnes, 26, of 125,540; Hansa Line, 27, of 142,527; Roland Line, 43, of 99,872; Neptune Steamship Co., 55, of 35,626; Hamburg-South American Line, 17, of 129,447; Rhederei Aktien Gesellschaft, 14, of 32,474; Kosmos Line, 14, of 70,013; Woermann Line, 10, of 44,419; German Australian Line, 17, of 86,042; German Levant Line, 24, of 45,789, and German East African, 6, of 41,024 tons, smaller companies make up the remainder of the fleet.

Develops New System of Induced Draft

FOR complete and economical combustion of fuel, whether in stationary or marine installations, a correct amount of air is essential. An insufficiency of air is the usual condition which must be overcome and such a condition is not only uneconomical as far as combustion is concerned but actually makes it impossible to develop the full amount of power for which the boiler is designed. There are two ways of correcting this condition (1) by increasing natural draft by means of high stacks or chimneys and (2) by artificial means either forced or induced draft. Broadly speaking, the distinction between forced and induced draft, is that between forcing air under and up through the grates, and in creating a partial vacuum in the uptakes leading to the stack by means of a blower at this point.

Recognizing the importance of proper mechanical apparatus for supplying air for combustion in boilers of marine installations, since natural draft can not be increased to the necessary amount due to limitations in stack height, a great deal of experimentation and several workable systems have been developed for forced and induced draft.

One of the latest of these is the system developed by the German engineer, Professor Hans Haas, and recently introduced in the United States and Canada by the Th. Goldschmidt Corp., 15 William street, New York. In this system, the gases are forced up and out of the stack, thus increasing the air suction in the furnace, accomplishing by artificial means much the same effect as that due to the provision of suitably high chimneys for stationary plants.

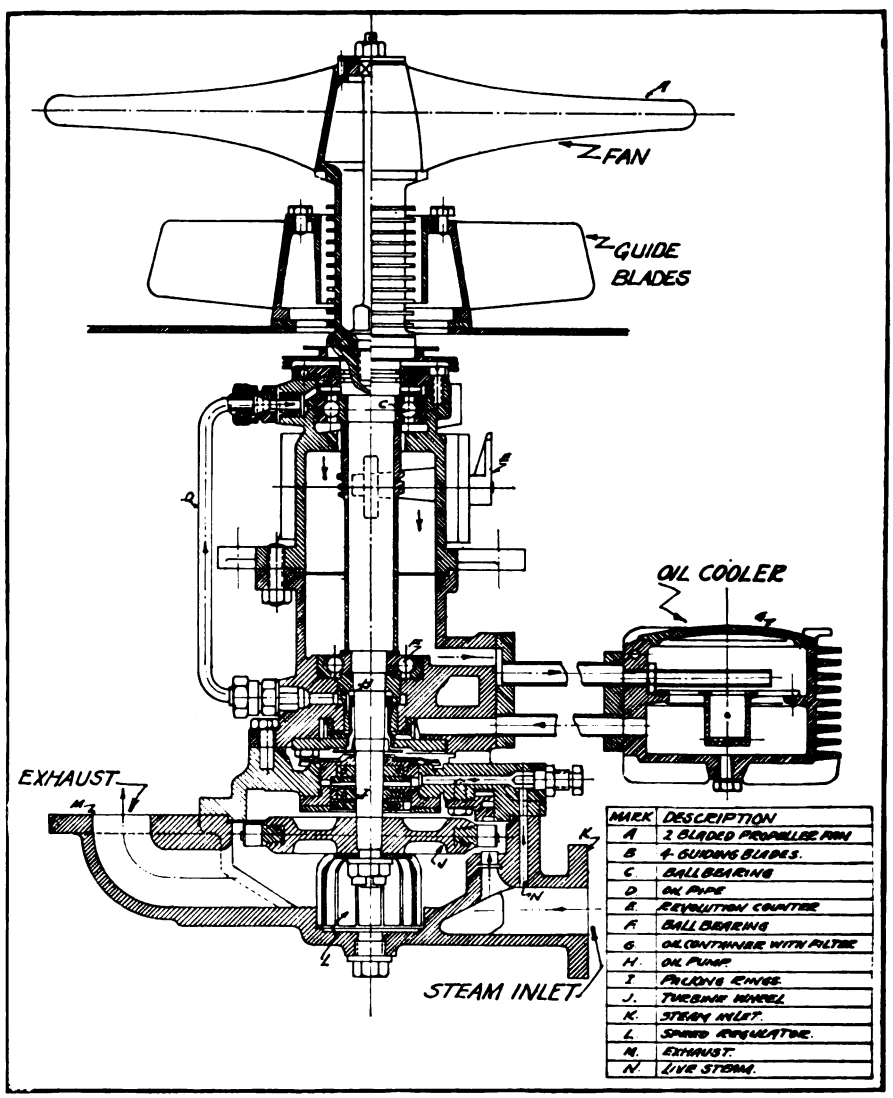
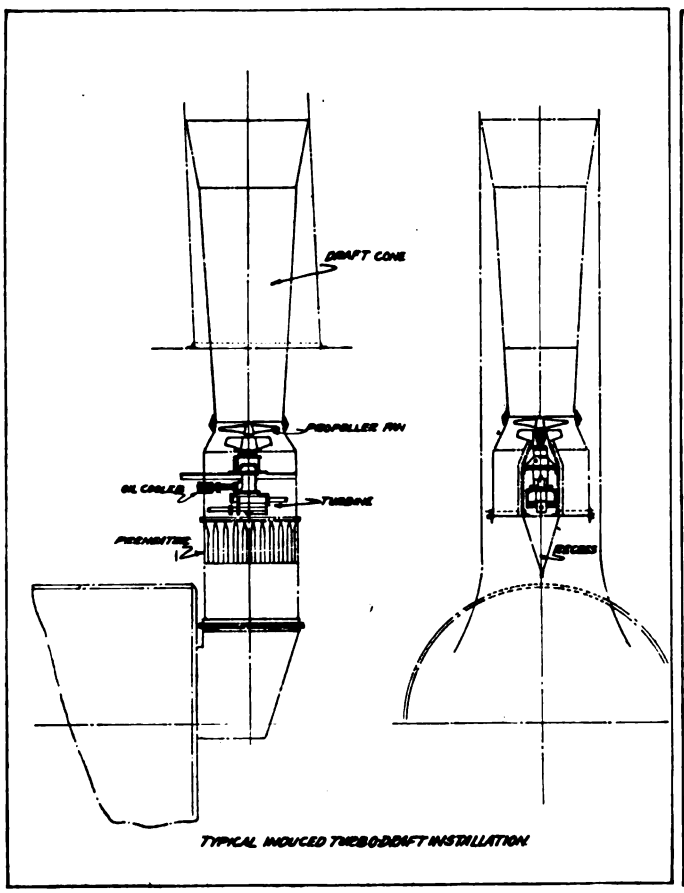


FIG. 1—CROSS SECTION THROUGH TURBO-DRAFT APPARATUS, ALL PARTS INCLUDING THE TURBINE, OIL COOLER, GUIDE BLADES AND FAN BEING CONTAINED IN ONE COMPACT SIMPLE MECHANISM OF MINIMUM SIZE

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The induced turbo-draft apparatus here described is illustrated in the accompanying drawing, Fig. 1, and the general method of installation as distinguished from other systems is clearly shown in Figs. 2 to 4. A 2-bladed propeller fan is driven by a low pressure, automatically regulated steam turbine. Both fan and turbine are mounted on the same shaft. The turbine end of the apparatus is located in an open recess in the uptake and only the propeller fan and the guide vanes which act on the contra-propeller principle, are exposed to the hot gases. A patented labyrinth packing box effectually closes the opening between the recess and the uptake.



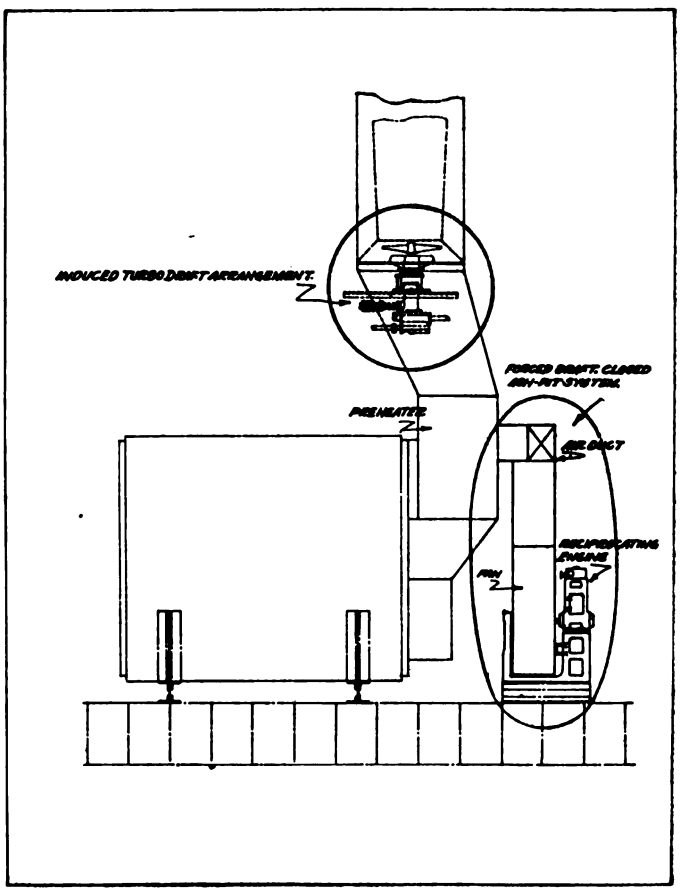


FIG. 2—TYPICAL INSTALLATION OF INDUCED TURBO-DRAFT IN UPTAKE FROM MARINE BOILER ILLUSTRATING HOW APPARATUS IS CONTAINED WITHIN LIMITED SPACE OF REGULAR MARINE BOILER UPTAKES. FIG. 3—HOW STANDARD FORCED DRAFT AND NEW TYPE OF TURBO-DRAFT ARE INSTALLED

It is stated above that the turbine operates on low pressure steam and is automatically regulated. The claim is made that this turbine will operate successfully on steam at atmospheric pressure or less though usually steam at about 25 pounds pressure per square inch or more is used. Steam to operate the turbine is, therefore, taken from the main engine at a point where the greater part of its energy has already been spent on useful work. According to varying local conditions, the steam may be taken from one of the receivers and after being used in the turbine it is passed to the feed water heater where the remaining heat is usefully applied. In this way, a minimum of steam is required for the turbo-blower as it makes use of steam after it has done its work in the main engine and before it goes to the feed water heater. Where there is no feed water heater, the steam required may be taken from the low pressure receiver and after passing through the turbine it is exhausted into the condenser. Speed of the turbo-blower is automatically regulated to correspond to greater or less work by the main engine, which in turn means greater or less steam required from the boilers, because the blower receives its power (steam) from the main engine. The action of the turbo-blower is under control over such a wide range that it can be regulated to suit all conditions from complete cut out to the limit of forcing the boiler. This adjustment only takes a moment and will not have any injurious effect on the boiler. In this way, the most careful draft adjustment is possible and consequently the highest economy in combustion can be obtained. It is possible to use the turbo-blower independently of the main engine in raising steam.

In order to withstand the hot gases, the propeller and guide blades are forged of high grade steel. The entire apparatus is of substantial and rigid construction and carefully balanced, and is centered in two strong ball bearings giving perfect alignment and reducing friction to a minimum. None of the parts is subjected to hard wear. Mechanical lubrication is provided by a small circulating pump enclosed in the turbine casing. The oil is forced through the bearings to an oil cooler and filter and then returned to the system. No detailed attention is necessary in operation as the lubricating oil only needs to be replenished after several weeks of operation.

Simplicity of installation is claimed for the system. After proper preparations, the required alterations to the uptake funnel and piping will only require about two days time. The installation may, therefore, be made under ordinary conditions during the usual stay in port, and can be carried out by any marine repair shop or machine shop.

This system may be installed in connection with economizers as well as air preheaters, thus minimizing the waste of heat in hot gases passing out through the stack.

The air preheater which is indicated in one of the accompanying illustrations is of special design particularly suited to the induced turbo-draft. It con-

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

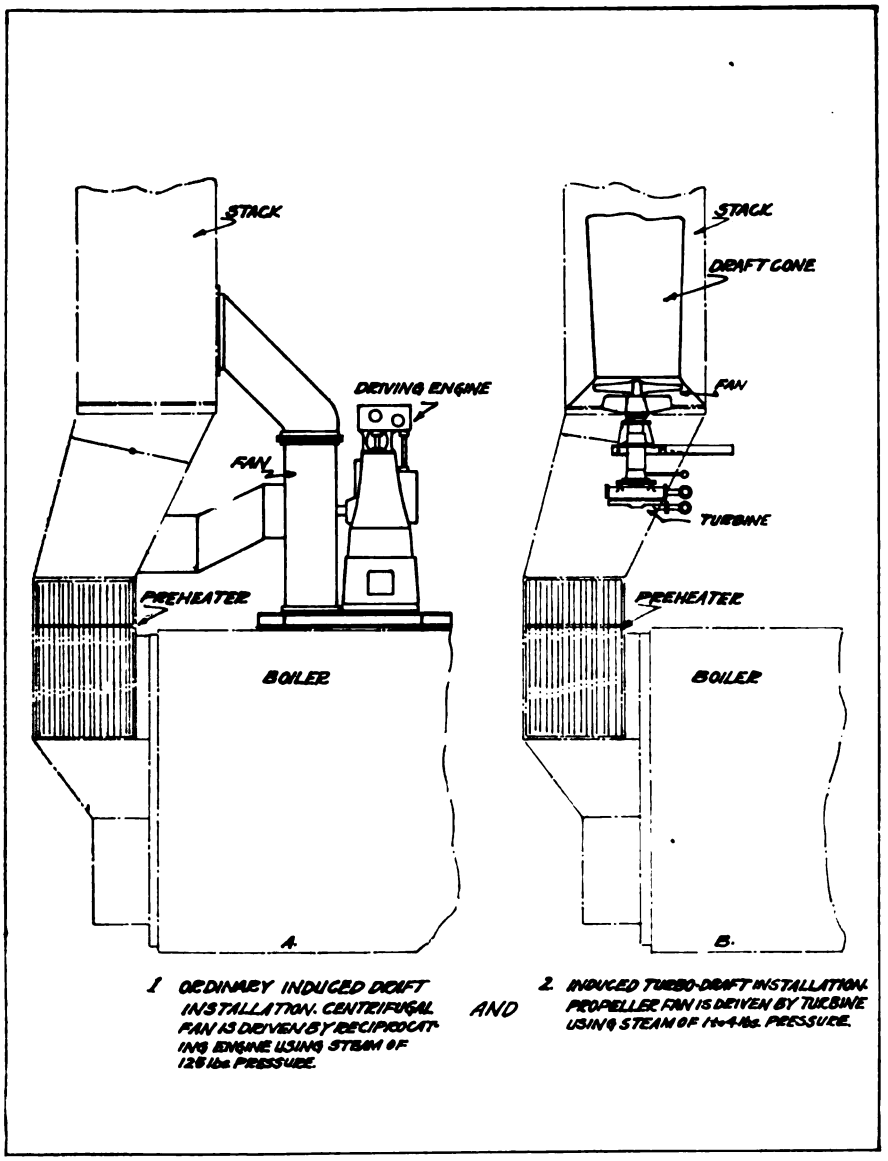


FIG. 4—TWO LAYOUTS SHOW DESIGNS OF STANDARD INDUCED BLOWER DRIVEN BY RECIPROCATING ENGINE AND THE INDUCED TURBO-DRAFT INSTALLATION

sists of a honey comb arrangement of thin sheet steel, and the air supplied to the furnace passes through nests of both horizontal and vertical channels. By this means, the period of heat absorption is prolonged and the air is brought into contact with a maximum of heating surface. The temperature of the flue gases is thus reduced and this heat is applied to the air for combustion, which of course, increases economy.

Advantages claimed for this system are: No outside separate space is required as the apparatus is installed within existing construction. On account of the compact nature of its design, the weight is reduced to a minimum. By the simplicity and comparative ease of installation, the cost is low and it can be used to advantage on the smallest vessels. Operating cost is low because steam which has already done its work in the main engine can be used. The cost of maintenance is low because no parts are subjected to great wear, and little care and attention is required in operation. Guarantees are given to their customers by the European distributors, Krebs & Co., Christiania, Norway, that an increase of 30 per cent in boiler capacity or a 10 per cent decrease in fuel consumption will result by the use of this system.

The general advantages of any system of forced or induced draft of course apply and may be enumerated as follows: An increase in boiler capacity or a reduction in size of boiler for the same power, a saving in fuel consumption for a given power; regulation automatically of combustion under all atmospheric conditions; the possibility of burning fuel of an inferior grade; complete combustion and consequently a reduction of smoke; lower and correspondingly lighter stacks with a resulting reduction in cost; cooler boiler room and less radiation from furnace fronts into the stoke hold making it easier for men to work in this place; protection to the structure of the boiler due to more uniform temperature maintained in the furnaces.

Late Marine Patents

Copies of any one of these patents may be obtained by forwarding 25 cents in stamps to Siggers & Siggers, patent attorneys, National Union building Washington, and mentioning MARINE REVIEW.

1492041—Life belt, Harry E. Long, Wellington, New Zealand.

1492114—Means usable with mechanical telegraphs for ships, John Stanley Wilson, Annandale, near Sydney, New South Wales, Australia.

1492400—Sectional boat, Eugene Schmiff, Scranton, Pa.

1492583—Submarine periscope, Adolf Steinle, Jena, Germany, assignor to the firm of Carl Zeiss, Jena, Germany.

1492614—Float, Martin Tworski, Vancouver, B. C.

1492981—Ship, Myron F. Hill, New Rochelle, N. Y.

1493215—Arrangement for gyro-compasses for preventing errors due to rolling of the vessel, Oscar Martienssen, Kiel, Germany.

1493489—Anchor, John A. Holzapfel, Jackson, Mich.

1493491—Anchor rope wringer and pulley, John A. Holzapfel, Jackson, Mich.

1493492—Anchor rope pulley, John A. Holzapfel, Jackson, Mich.

1493588—Sighting device for naval guns, Walter Akeman, Essen, Germany, assignor to Fried Krupp, Aktiengellschaft, Essen-on-the-Ruhr, Germany.

1493991—Concrete ship, Herbert M. Knight, New York.

1493664—Safety swimming belt, Albert Blum, New York, assignor of one-half to M. Schulman and one-fourth to Solomon Joseph, both of New York.

1494545—Anchor, John A. Holzapfel, Jackson, Mich.

1494639—Ship's davit, Fred Simpson, Blundellsands, near Liverpool and Arthur R. Thomas, Woods, Hertford, England.

1494901—Life preserver, Frank Gudick, New York.

1495052—Marine clock, Frederick Wehinger, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn.

1495330—Revolving life guard. James Kirkland, Liverpool, England.

1495529—Raising sunken ships. Jesse W. Reno, New York.

1495569—Boat-launching mechanism. Charles W. Blake, Pleasantville, N. J.

1495688—Method and device for the salvage of sunken ships. Bernhard Arthur Lennart Hasselberg, Stockholm, and Karl Gustaf Ostberg, Neglinge, Sweden.

1495926—Submarine and long distance telephone system and method for operating the same. Ludwig Rellstab, Zeist, near Utrecht, Netherlands, assignor to Naamlooze Vennootschap de Nederlandsche Thermo-Telephoon Maatschappij, Utrecht, Netherlands.

1496587. Life-saving suit. James F. Mordica, Philadelphia.

1496746—Submarine signaling device. Louis B. Slichter, Cambridge, Mass., assignor to Submarine Signal Co., Portland, Me.

1497444—Marine engine governor. Thomas Jackson, Lewisham, London, England, assignor to Allan Ramsay, Folkestone, England.

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Keeping Your Ships Up-to-Date

Shipowners and Shipbuilders Have Joint Interest in Maintaining Merchant Fleet Abreast and Ahead of Trade Demands

BY THE RT. HON. VISCOUNT INCHCAPE

THAT the shipbuilder is commercially dependent upon the shipowner is true in the limited sense that if there were fewer orders for ships there would be less shipbuilding and much less of shipbuilding to owners' specifications. But it is the essence of efficient shipowning that orders for ships should be forthcoming with more or less regularity. Especially is this the case in the passenger trades of the great lines. If a line is to retain its accustomed clientele against encroachment by rival concerns, whether of its own or foreign flags, its fleet must entrain a ceaseless process of renewal and improvement. In a lesser but still vital degree, this is true of the cargo steamer, and it is true down to the smallest detail of up-to-date efficiency.

Given two lines in any trade, and other things being equal, that line which, for example, by its superiority of holds, hatchways and lifting gear can give the cleaner and quicker delivery at the quayside will enjoy some preference among the constituents of the port. This is, perhaps, bringing the principle of competition down to a fine point, but no shipowner can continue to exclude an accepted public facility from his ships without prejudice to his business.

Trade Influences Ship Types

The great shipping corporations, are, perhaps, less dependent on the shipbuilder than is the owner of smaller tonnage and fewer ships, who must more completely rely upon outside professional advice; but each, in a varying degree, must look to the shipbuilder for guidance in the adoption of advanced principles of design, construction, power or equipment. Efficient shipowning makes for efficient shipbuilding, and efficient shipbuilding makes for commercially successful shipowning. The two things must continually act and react. It is easier to run profitably a well planned, well constructed and well engined ship than one which is not so well provided, and, viewed from this angle, it is plain that British owners and British builders best work for their own profit and for the well-being of the shipping industry when there is close and cordial co-operation between them.

In considering the relation of shipbuilder and shipowner, one reflects that a regular trade must, in the nature of things, evolve its own type of ship. An example of this is afforded by the present-day ships of the British India Co.'s ARONDA class, by which the fast biweekly service for the conveyance of mails, passengers and cargo between Calcutta and Rangoon is maintained. The British India Co. commenced operations in 1856 as the Calcutta & Burmah Steam Navigation Co. It was established at the instance of the Honourable East India Co. for the especial purpose of carrying on a regular mail service between, as its name indicated, Calcutta and Burmese ports. That mail service has been continued, practically without a break, to the present day.

LORD INCHCAPE
One of England's Largest and Most Successful Shipowners

At the time of its inception, there were upon the eastern side of India no steamers but those of the Peninsular & Oriental Co., a few government transports, and one or two ships engaged in the China opium trade. The home trade of India was divided between the native vessels and square-rigged ships owned by European merchants and manned by European officers and native crews. These latter vessels vied with those of the government in smartness and dexterity of handling; they were armed, and often in the course of voyages had to make ready for a skirmish with Arab pirates or Malay robbers. They carried little besides their owners' cargoes, but they were of a type evolved by the conditions of their employment.

There was, at the outset, no time to build steamships for the Calcutta-Burmah service, and two vessels, the CAPE OF GOOD HOPE and the BALTIC, were purchased and sent out to India round the Cape—at that time a tedious and expensive voyage.

Developing Ship Design

In the early days the conditions indicated no very special demands as to the type of ship to be constructed; but with the development of trade and the resulting increase in the number of Europeans in Rangoon and the minor Burmese ports, the essentials of this local service began to be perceived. Greater trade activity was followed by more intimate business relations between the two neighboring communities, and this condition of things was inevitably succeeded by closer attention to the comfort of passengers. It was early apparent that, in steamers which plied constantly in tropical waters, passenger accommodation must be especially designed to meet that condition, and as much was done in this direction as the imperfect resources of the period permitted. Among the travelers on these vessels were to be found occasionally the responsible heads of the company and members of their supervising staff; it is a safe assumption that these people traveled with the lamp of their intelligence constantly burning and with a keen eye to derive practical values from the suggestions of a more or less practical nature which passengers, among others, laid before them. Throughout the 68 years which have intervened, the evolution of type in the steamers of this route has proceeded, and a detailed examination of the first vessels to be built for the line and those of the present day would discover no similarity between the two.

In the process of ship evolution two factors have constantly worked side by side. On the one hand, there has been incorporation of the general science or art of ship and engine construction with all the successive improvements in main

Read at the first world power conference, London. The author is head of the Peninsular & Oriental Steam Navigation Co. and affiliated companies, making him one of the largest shipowners in the world.

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

and auxiliary machinery, including machinery on deck, expressing the patient research and achievement of the shipyards; on the other, the selective process by which, from a multitude of ideas, the steamers have, through the medium of their responsible administrators, gathered to themselves, and sometimes created, the especial features and improvements of detail necessary for the successful oncarrying of their individual trade.

Trade Determines Types

Owners of large fleets of costly tonnage possess in their superintendents and technical staff an aid to policy which, to owners and builders alike, is of great value. The business of the technical officials is, among other things, to collate the observations and reports of the executive afloat or at the quayside, and to reduce this experience to exact terms. But, with an occasional exception, a company's superintendents usually turn their attention to these matters as part of a wider range of duties which preclude them from concentrated and continued regard of the finer problems of form and power. They are more intimately concerned in keeping themselves informed of each development in the multifarious equipment, furniture and apparel of ships, with especial reference to the trades in which their owner's fleet may be engaged.

Generally it may be said that the dimensions of a steamer, the details of her passenger accommodation, the disposal of her carrying spaces, the choice and arrangement of her cargo gear, and, above all, the determination of her economical speed and bunker capacity (speed also involving some consideration of the fineness or otherwise of her lines and hull contours), are matters which naturally grow from the external conditions of the trade in which she is engaged, and that one chief business of the shipowner is to maintain an alert and critical mind so that, in the projection of new ships, the accumulation of experience and suggestion may enable him to mark, in his later steamers of any given type, some advance upon their predecessors.

The chief function of the shipowner, if he is to get the best values out of his relations with the shipbuilder, is a digestive one. In other words, it is up to him to accumulate data from voyage to voyage; to determine how much of that which is new in the way of ideas can be usefully applied; to reject that which is not germane to profitable and efficient running, and to pass on the selected data to his ship designer and shipbuilder. In the early marshalling of these matters shipowners must rely upon their expert staff, but the final responsibility of decision must, for good or ill, rest with themselves.

In considering the design and equipment of a ship, inside, outside and in the engine-room, the paramount consideration of the shipowner must always be that she shall be capable of earning her living. To do this she has to pay and feed her crew; to pay all her running and port expenses and the cost of her upkeep; to provide a return for those who are immediately responsible for her management and their staffs; to pay interest on the capital invested in her; and to put by year by year money in sufficiency for her own replacement whenever, by casualty or the lapse of time, that may become necessary. Moreover, as there is no standing still in shipbuilding policy, she must, in the course of her life, provide not only an amount equal to her own original cost, but the larger amount necessary to produce a successor, of larger tonnage, more elaborate fittings and improved type, whereby that successor may exhibit the experience of the intervening years to all concerned, not least of whom is the traveling public.

And here a word may be said on the subject of the responsibilities which the shipowner and the shipbuilder must for better or worse, shoulder together. The shipbuilder is legally quit of his liability when he has fulfilled his contract, but it is pretty safe to say that his sense of responsibility does not end there; the long test is, however, with the shipowner. But the projection of a group of expensive passenger steamers of uniform type, which may involve a capital outlay running into many millions of pounds sterling, demands, in the most fortunate circumstances, from shipowner and shipbuilder alike, a certain quality of courageous judgment, and not a little imagination, besides the basic attributes of knowledge and experience.

Need Expert Study

In the best practice of later years it has been the custom of our great shipbuilding firms to recruit promising material from our universities and technical colleges and to train the young man so selected for the work of design and construction. From the ranks of these cadets there have inevitably emerged men whose attainments have marked them for the highest responsibilities; and it is to be recognized that, in the past, appreciation of the value of early technical training by the heads of the shipbuilding and engineering trades was not lessened by the fact that they themselves had, in many cases, passed through the workshops as young men and had had, in their early middle years, to gather by laborious effort that equipment of technical and scientific knowledge which the lack of specialized educational facilities had, at the outset, denied to them. To the joy of personal achievement and fulfilled ambition, these pioneers must have added the happy reflection that their travail had not been in vain and that their own laborious experience had widened and smoothed the road for the younger generation. That the younger men were eager and able to grasp the opportunity, there are today a number of sufficiently striking examples. It is upon these trained scientific minds that the shipbuilder and shipowner are able to rely for secondary aid, for by the light of their intellects is the path kept, through a maze of conflicting theories and ideas, which leads to the well of constructive truth.

Lean On Shipbuilder

If, therefore, it be true that, as regards detail, the shipowner must look to his own knowledge and experience, it is equally true that he must, as regards the forces of propulsion and resistance, primarily rely upon the untiring research of the shipbuilder and his expert staff and upon their familiarity with the two interdependent factors of power and modeling and the multitude of considerations and detail which on those factors depend.

The institution of the modern testing tank, with its almost daily development of efficiency, has given shipowners a sense of security in accepting shipbuilders' hull designs which formerly was denied to them, and it is possible today to forecast the performances of a commercial ship, in all varieties of trim, with a degree of accuracy which is valued alike by owners, loading brokers' superintendents, and, finally, by those responsible for the safe navigation of the ship from port to port.

In staple trades, regularity of service tends to minimize the necessity for very high speed, and it is this fact which enables a steamer of moderate power to operate to the satisfaction of shippers and consignees. Take, as an extreme instance, a series of shipments of grain in bulk. Once the initial consignment has been delivered, provided that succeeding consignments arrive at reasonably regular intervals, it is a matter of little moment whether they cross the seas at 8 knots, or 10 or 12. Allowing 14 days in port at each end, it will take, on a round voyage of 10,000 miles, 10 steamers each of 5,000 deadweight tons to maintain a weekly delivery of 5,000 tons at the outward and homeward terminals. These steamers will travel at an economical speed of, say, 10 knots; will therefore be moderately manned, moderately engined, and of moderate coal consumption; and will earn the general market rate of freight. To convey

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

FAST FREIGHTER LEWIS LUCKENBACH WHICH RECENTLY CARRIED FROM THE PACIFIC COAST TO BALTIMORE THE LARGEST CARGO OF LUMBER EVER LOADED ABOARD SHIP

the grain at 15 knots would necessitate the employment of only eight steamers, but of higher value and power, and the running of them at the higher speed would be more costly than the operation of a larger number of slower ships.

Almost equally, overseas markets accustomed to receive consignments of general cargo can afford, except in special instances, to ignore high speed in transit, provided they can rely on regular arrivals and quick discharge. Herein lies to the shipowner the virtue of the cargo liner of large hold capacity, medium speed and a limited allotment of comfortable passenger accommodation, for the ratio of earning power to capital and running costs should be higher in such a ship than in the faster and most costly mail steamer. So much for speed.

Fixing Economical Size

As to tonnage, it is, other things being equal, less costly to carry 10,000 tons of cargo in one full ship than in two, but there is in any trade a point at which enlargement of the floating unit ceases to be advantageous. General cargo is, and probably will continue to be, carried, as to nine-tenths of it, by the cargo liner; but this trade involves a considerable amount of human intercourse, and from it is born a large part of the faster passenger traffic; and while a minority of passengers are content, for reasons of economy, to travel in the slower ships, the busy man or woman to whom time is a consideration and the leisured people to whom the extra cost of passage in a mail steamer is of no moment, make up between them the majority of the liner's traveling public. And if, from the business of the cargo liner, arises much of the passenger traffic of the faster steamer, the latter, again, by her extra speed and other superiorities, attracts to herself the choicest cargo, at the highest rates of freight, with little or no damage to the business of her humbler sister. Plainly the fleet is well constituted which embraces both elements in due proportion, for each is complementary to the success of the other.

Opposes Standardized Ships

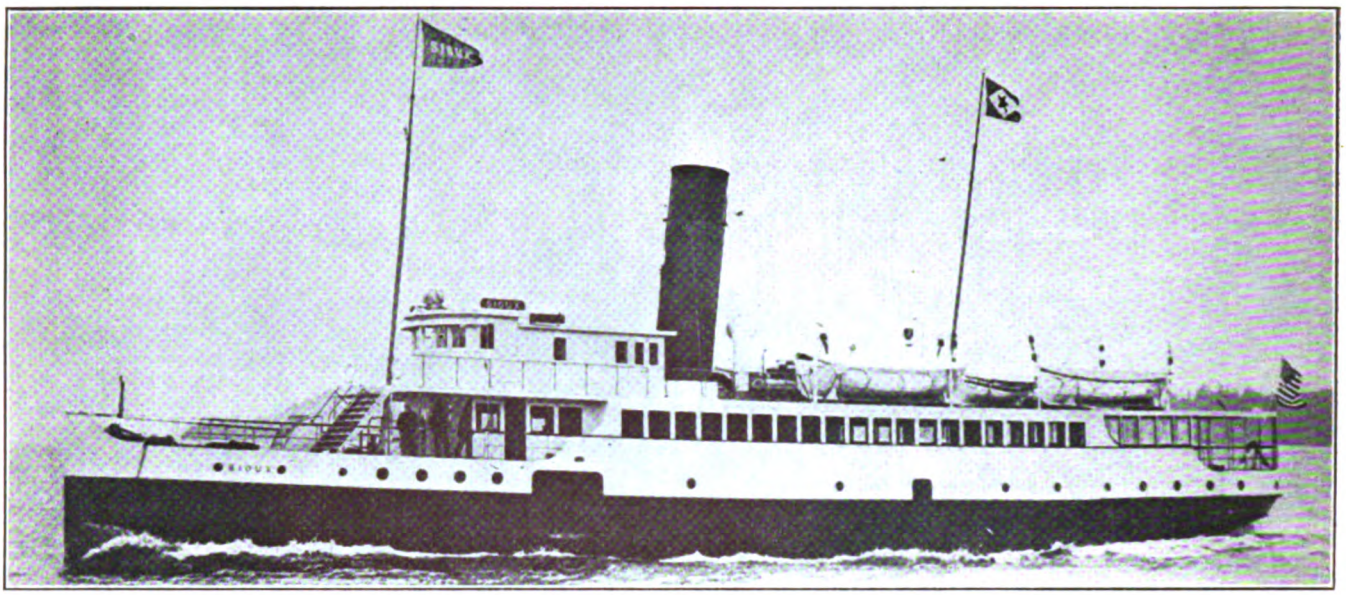
Some of the above arguments may have seemed to hint at standardization of ships. Owners, in ordering groups of identical vessels certainly do practise standardization to a limited extent, but under ordinary conditions there is nothing to recommend the mass production of standardized ships. That is a method which may be described as the communism of ship construction; and communism may be likened to a race in which, theoretically, all competitors come in first, with no prizes. A properly constituted mercantile marine or a properly constituted human society must be productive of types of individual excellence in their particular walk of life, whether they be ships or men; and, in laying down the plans of a ship, once the broad principles of her constitution —capacity, buoyancy, stability, and mechanical propulsion—have been conceded, there the similarity of ship to ship, or at least of type to type, must terminate and the region be entered in which lies the widest imaginable diversity of detail and assembly, and from which have been produced the hundred-and-one excellencies of the shipbuilders' art and craft which are afloat to-day. Britain was the birthplace of the mechanically propelled ship; here has been generated all the best practice of the engineer and the naval architect. But it must never be forgotten that neighboring races have time and again shown their capacity to receive British ideas in shipbuilding and to improve upon them; and this they have done partly as the result of widespread technical education, so that one is met by the uneasy thought that the common level of technical intelligence, in prewar days, had reached in some countries a higher mark than with ourselves. But the British have shown themselves—there were notable instances during the late war—capable, too, of assimilating the creations of clever foreign brains and, in no long time, of going one better; and there is no reason why we should not do this in the matter of technical schooling. Elementary science in our primary schools, of whatever type, and technical study in our secondary and public schools, are today receiving a measure of attention greater than ever before.

Seek For Improvements

This raises one other point: it seems to be of the first importance that our great shipyard and steel works should continue to keep an eye upon what their neighbors abroad are doing in the way of discovery and invention. Great principles of constructive industry—for all that they may be, for some time, used exclusively at their source—become, like great music and great architecture, the common property of mankind. Knowledge—for the taking—is for all; its application is the test in which the best man, the best shipyard, the best industrial community or nation, must in the long run win.

We should carry forward the quest for improvement, in method and economy, in the working of marine engines and their conquest of the natural forces opposed to them, so that the shipping industry of the empire will be helped to maintain that supremacy in the transport of the world's goods which it has so long enjoyed, and which was never more jealously regarded than today.

Generated on 2024-07-26 06:14 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Steamer Sioux after 14 years service in Pacific waters is converted to the automobile ferry shown below

Rebuilds Steamer Into Auto Ferry

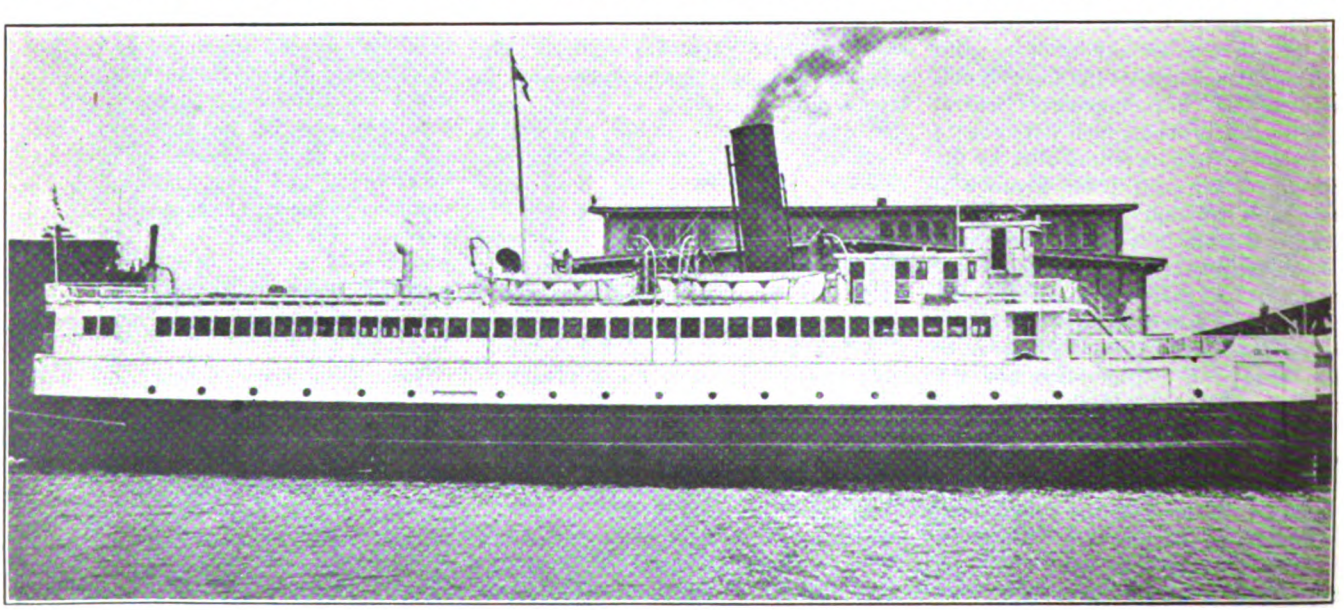
AN UNUSUAL type of ocean-going automobile ferry is the steamer OLYMPIC which has recently been delivered by the Seattle plant of the Todd Shipyards Corp. for operation in the Straits of Juan de Fuca, between Port Angeles, Wash., and Victoria, B. C. The water on this run at times is rough and for this reason both ends of the automobile deck are closed with steel doors. The OLYMPIC maintains a running schedule of 16 knots.

This vessel was formerly the steamer SIOUX, built in 1910, her dimensions being 148 feet 3 inches in length, beam 24 feet 2 inches, depth 14 feet 8 inches, gross tonnage 461 and net tonnage 266. The motor power consisted of two Seabury boilers equipped for burning fuel oil and one 4-cylinder triple expansion reciprocating engine developing 1400 horsepower at 283 revolutions per minute.

In making the alterations, the vessel's superstructure was completely dismantled to the main deck, the hull cut between the engine and boilers, leaving engine and boilers in the original position. The two portions were drawn apart a distance of 24 feet 6 inches and a new steel section built in the space thus provided, increasing the gross tonnage to 1310 and net tonnage to 866. Four additional water tanks were installed in this new section.

The main deck plating was removed and the main deck line raised approximately 5 feet. The hull plating down to the turn of the bilge was removed and the main deck line raised leaving the original framing while new deck beams and a new framing were fitted, increasing the beam of the vessel to 38 feet 6 inches. The framing is in the form of a truss, bracketed to the old frame at the bottom and to the new deck beams at both ends at the top, new shell plating being fitted from the turn of the bilge to the main deck, and new steel main and passenger decks installed. The vessel's hull is completely divided into seven watertight compartments by the construction of heads.

The stern of the vessel was entirely altered to take care of a new and heavier



OCEAN GOING AUTOMOBILE FERRY OLYMPIC AS REBUILT FROM PASSENGER STEAMER SIOUX

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

type stern frame with a drop skeg to allow for a new propeller of a large diameter and pitch. No changes were made to the propelling machinery except minor changes made necessary by the increased length and beam.

The new passenger deck is covered with composition and is completely enclosed with the exception of the deck forward. Sides and end are fitted with windows for the full length. The after end of this deck is given up to a galley, lunch counter and a cigar and refreshment booth. The remainder of the passenger deck provides for a purser's office, lavatories and rest rooms, and seats to accommodate 550 passengers. These seats are constructed of Philippine mahogany with varnish finish and are fitted with leather upholstered cushions.

The entire main deck is covered with a 2-inch coating of composition deck covering and with the exception of the engine and boiler casings and stairways is given up to accommodation of automobiles, of which 60 may be carried. The method of hauling automobiles is by the installation of two sliding watertight doors at the bow, one hinged watertight door, port and starboard, approximately 20 feet aft of the bow, and double sliding watertight doors at the stern. Wells are provided at the forward and after ends of the main deck in which are built turntables for turning automobiles in order that they may be unloaded at either the forward or after end of the boat.

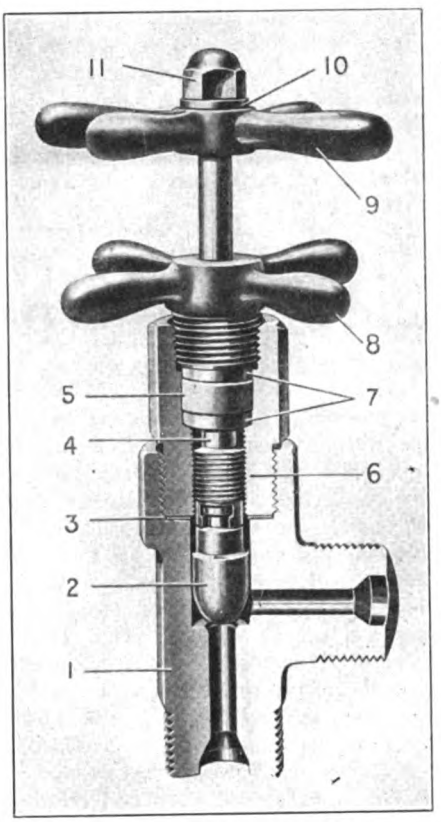
Officer's quarters are provided on the boat deck and consist, in addition to the wheel house, of staterooms for captain, deck officers and steward, chief engineer and first engineer. The crew's quarters are provided in the new portion of the hull below the main deck and above the four new water tanks. Access to crew's quarters is by a companionway leading from the main deck and access from the engine to boiler room is by watertight doors between engine and boiler room bulkheads.

W. H. Hendricks, general sales engineer of the New Jersey Zinc Sales Co., read a paper entitled "Zinc" before the Cooper Union Chemical association and students of the chemical department on Oct. 15. The New Jersey Zinc Co. 3-reel film of "Zinc Oxide for Use in Paint—from Mine to Save the Surface" was used by Mr. Hendricks to illustrate his lecture.

The plant of the Seattle Shipbuilding & Drydock Co., Seattle, has been purchased by the Lake Union Drydock & Machine Works and has been moved to the latter company's site on Lake Union. The sale included a 600-ton drydock, machine shop equipment, tools, etc.

Designs New Type Valve for Oxygen Manifold

Use of oxyacetylene apparatus for welding and cutting has grown so universal throughout all branches of the steel and allied industries that no marine repair shop or shipyard today can afford to be without such apparatus. Even the larger ships find it most useful to carry a small outfit in conjunction with their machine shops. Any improvements and refinements, therefore,



OXYGEN MANIFOLD VALVE

in any of the parts of the apparatus which insure complete security from danger in its use either through ignorance or carelessness, is of direct interest to everyone connected with the construction, repair or upkeep of ships.

On account of the very high pressures which the oxygen manifold must carry, the development of an entirely satisfactory valve for such manifolds has always been a difficult problem. After extensive study and experiments with several different designs, the Oxweld Acetylene Co., 30 East Forty-second street, New York, has recently succeeded in developing a valve for this purpose that in its experienced opinion meets every requirement.

The accompanying illustration shows this new type of valve in cross section from which the details of its construction and method of operation may readily be understood. Referring to the identification numbers on the illustration: The body (1) has a formed seat receiving the stem tip (2). This tip is attached to and carried by the stem (4), by means of a swivel joint. In this way, therefore, the tip is enabled to find its own natural seat in the body. The stem screw by means of which the valve is opened and closed is located in the inner lower end of the stuffing box (6) which is made gas tight into the body by means of the lead gasket (3). To make the stem itself gas tight, a rubber packing ring (5) is compressed between packing rings (7) by means of the hand wheel and nut (8).

From the nature of its construction, this new valve is fool proof. Should the operator unscrew the hand wheel (8) all the way, there is still no possibility of the internal parts being blown out by pressure because the stem screws into the stuffing box. Even if both the stem and the hand wheel were completely unscrewed, the parts could not come out, because the large end of the stem would lodge against the inner end of the stuffing box.

Three more consolidations of shipping board routes have been completed. Lykes Bros., New Orleans, will operate vessels from New Orleans and Texas ports to Holland and Germany, under the trade name of the Southern States' Lines. The Waterman Steamship Co., Mobile, Ala., will operate from Mobile, Pensacola, Fla., and gulf ports to the United Kingdom, Bordeaux and Hamburg, under the trade name of the Mobile Oceanic Lines. Daniel Ripley & Co., Houston, Tex., will operate from Texas ports to France and Belgium, under the trade name of the Texas Star Lines.

Lykes Bros. now operate 20 ships, the Waterman Steamship Co., 11 and Daniel Ripley & Co., 7.

When the Los Angeles Steamship Co.'s liner CITY OF LOS ANGELES docked at the Wilmington, Cal., terminal recently she established a new time record for the run between Honolulu and Los Angeles and commenced a new era in island passenger trade history. The vessel ran from dock to dock in 5 days, 22 hours and 6 minutes, it was reported by Captain Poulsen.

In a paper read at the recent World Power conference at London Sir George Beilby quoted figures to show that less than 69 per cent of the merchant tonnage of the world in 1923 was entirely dependent on coal, as compared with 89 per cent in 1914. In these nine years the proportion of gross tonnage using oil in furnaces rose from 2.6 per cent

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

to 24.2 per cent, and of tonnage using oil in internal combustion engines from 0.45 per cent to 2.5 per cent. "It is clear," said Sir George, "that in view of the immediate advantages which result from the replacement of coal by oil, shipowners are prepared to pay from two to three times the price per ton of oil as compared with coal. It is equally clear that the great oil distributing firms must have been prepared to guarantee to shipowners supplies of oil for a number of years ahead at prices which have not been regarded as prohibitive."

The Philadelphia & Norfolk Steamship Co. has changed the name of the steamer LAKE TIPPAH to DELAWARE RIVER. The company now has in operation the steamers DELAWARE RIVER, JAMES RIVER and LAKE GALIEN.

Trial Trip of New British Collier

The self-trimming collier FORESTBEECH, built by Swan, Hunter & Wigham Richardson, Ltd., at their yard at Southwick-on-Wear, England, successfully ran a trial trip off the mouth of the River Tyne recently. The owner is the Forest Shipping Co., managed by Messrs. Mann, MacNeal & Co., London.

The chief dimensions of the ship, which has been built to the highest class of Lloyds Register, are 240 feet in length between perpendiculars and a width of 37 feet 2 inches. She is designed to carry about 2300 tons on a moderate draft.

The water ballast is carried in the cellular double bottom and also in the two peak tanks. For rapid loading and discharging of cargo, large hatches are provided, together with a number of steam winches and steel derricks. The steam windlass was made by Harfield & Co. Ltd.

Accommodation is provided in the fore end of the bridge for the chief officer, second officer and steward, together with a saloon. The captain's quarters are in a steel house above. The engineers are berthed in the after end of the bridge and the seamen and firemen in the poop. The ship is lighted throughout by electricity, and steam heating is provided in the living accommodation amidships.

The engines driving a single propeller have been built by MacColl & Pollock, Ltd., of Wreath Quay Engineering Works, Sunderland. They are of the triple expansion type and are placed amidships.

Steam is supplied from two single-ended boilers working at a pressure of 180 pounds per square inch.

Diesel Auxiliaries Cut Operating Costs

BY RICHARD W. ALLEN

APPLICATION of the diesel engine for driving auxiliary machinery has lagged very little behind its employment for propulsion. Although the mercantile marine has conservative traditions, the use of diesel engines soon outgrew the experimental phase, and it is now recognized that such complete reliance can be placed in them that it is unnecessary for any other means for driving the auxiliary machinery to be provided. In some earlier cases it was preferred that the auxiliary machinery should be operated by power derived from steam rather than from diesel engines. Generally, however, it may be considered the practice in diesel engine propelled ships of the present day to employ diesel engines also for driving the auxiliary services. There is little doubt that the most efficient method is that by which power for these is derived from a dynamo or dynamos, driven by one or more independent diesel engines, thus obviating the losses caused by steam condensation and leakage in long runs of piping, and also considerably reducing the complement of stokers required.

All of the deck machinery, cargo winches, engine room equipment, comprising pumps for ballast, cooling, bilge, etc., and also the steering gear are electrically driven, and this tendency toward the replacement of steam by electricity has caused a continual increase during the last few years in the capacity of the diesel engine driven electric generators. Where formerly two 65 kilowatt units were possibly sufficient, there are today ships with installations comprising four sets of 300 kilowatts 500 brake horsepower and still larger installations are now under consideration. In this connection it may be an advantage to have a number of units of the same size, rather than possibly one of large capacity and one of small capacity. Thus the benefits of interchangeability of working parts, greater flexibility in meeting a varying load demand, and also a much greater opportunity for overhaul, all favor the multiple-unit system.

With regard to the future, there is no doubt that in the mercantile marine, diesel-engined vessels will gradually supplant steam, and some leading authorities are even of the opinion that few more steamships will be built. Following this tendency, the auxiliary services of all vessels will tend more and more to rely upon the diesel engine-driven electric generator for their supply of power. Thus, in spite of the enormous strides that have been made during the last 12 years in this direction, it is probable that the future will show even more rapid progress.

Paper presented at the first world power conference, held recently in London, England.

The cargo carrier BARRINGTON COURT, built in the yards of Workman, Clark & Co., Ltd., Belfast, Ireland, went for her trial trip on Sept. 10. The vessel is a single screw steamer built to the order of Haldin & Co., Ltd., and will be used by them for transporting grain and for general cargo services. The registered dimensions are 396.65 x 53.15 x 25.55 feet, with a gross tonnage of 4900 tons. Special consideration has been given to the arrangement of accommodation. Five large cargo holds are arranged for carrying grain cargoes and the structural arrangements have been designed to render the holds free from obstructions. The cargo gear is of the latest type and a large number of winches and derricks has been specially arranged.

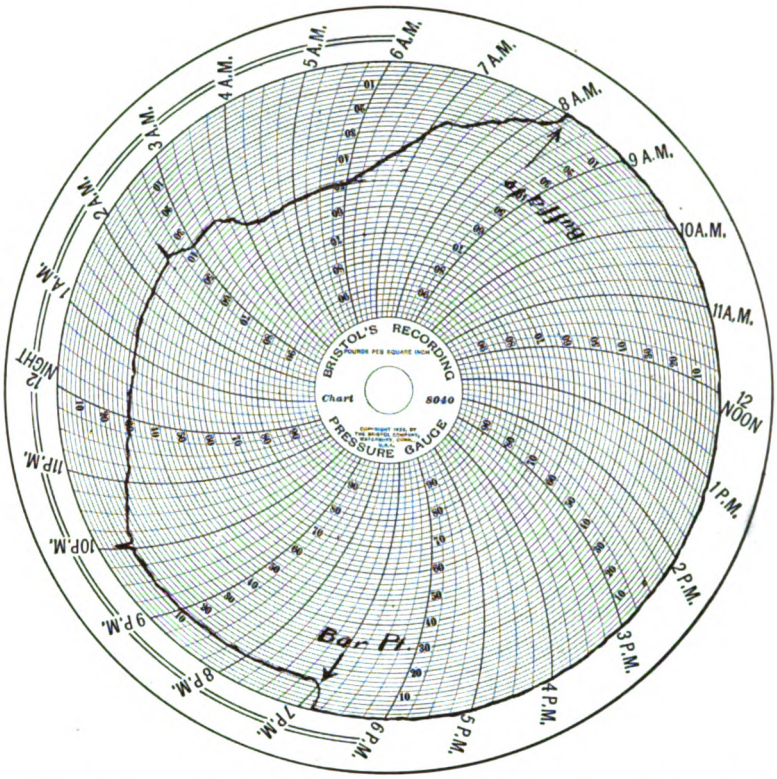
The machinery also was built at the works of Workman, Clark & Co., Ltd., and consists of one set of vertical inverted, direct acting surface condensing triple expansion engines. The speed of the vessel is over 10 knots. She is a duplicate of the ARLINGTON COURT which was recently completed for the same owner.

The first coastwise liner on the Pacific to carry a complete personnel of deck officers, each with master's certificates for any tonnage on any ocean, is the express steamer H. F. ALEXANDER, formerly the GREAT NORTHERN and now plying between Seattle and Los Angeles. The deck department includes seven master mariners consisting of five navigating officers and two regular captains who alternate in commanding the liner.

The shipping board has sold to the California & Eastern Steamship Co. the steel steamer WEST KATAN, previously operated in the Australian trade. The new company has placed its vessel on berth for the Atlantic and she will form the nucleus of a new fleet to be operated regularly between the two coasts.

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

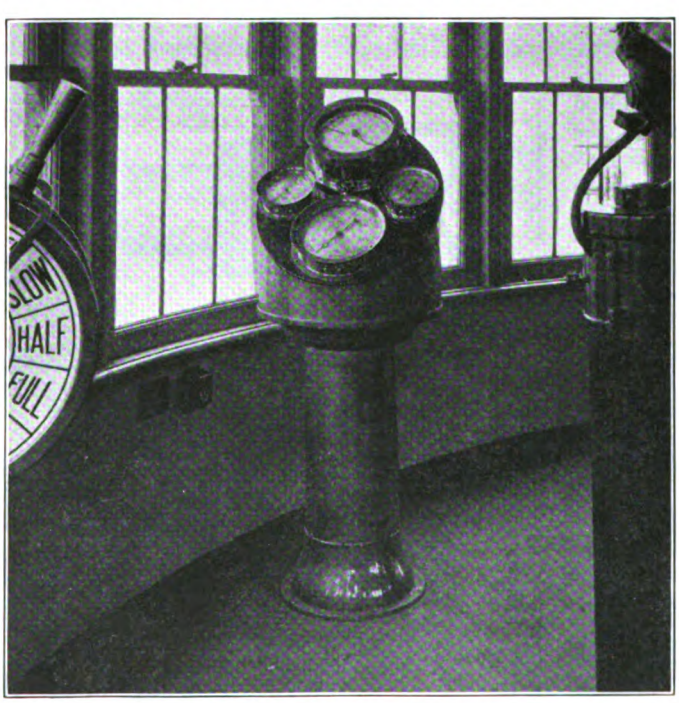
New Machine Traces Record of Sea Depths



Depths automatically recorded by lake vessel on run from Bar Point to Buffalo

NOW in operation on the Great Lakes are upward of 25 automatic sounding machines. The most recent installations were made on the two motor vessels built for the Ford Motor Co, BENSON FORD and HENRY FORD II, and the two passenger liners built for the Detroit & Cleveland Navigation Co., GREATER DETROIT and GREATER BUFFALO. In this machine, known as the Haynes type, the object sought is (1) to secure a continuous sounding beneath the bottom of a vessel while traveling at the regular rate of speed and in this way to do away with outside strandings and (2) to place the indication of this sounding in the pilot house at any convenient point so that the officer in charge may readily see the record of depth through which he is traveling.

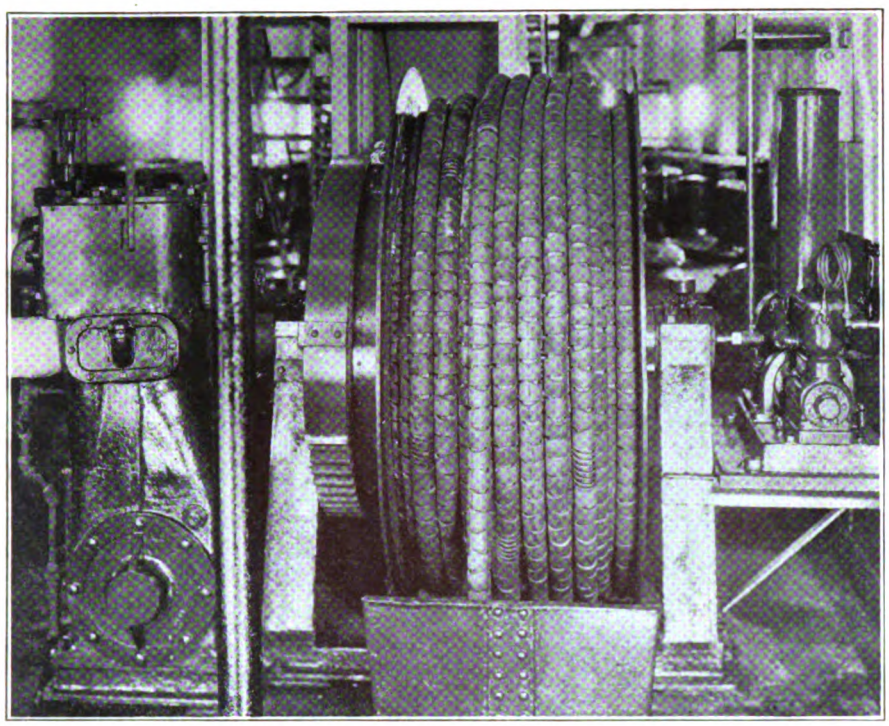
The principle upon which the machine operates is given in the science of physics, that beneath the surface of a liquid there exists a force which at a given depth is exerted in all directions with exactly the same pressure. Careful measurements have shown that this force is directly proportional to the depth, that is, the pressure in water at a depth of 20 feet is double what it is at 10 feet and at 50 feet is five times as great. Knowing the pressure that exists in a body of water at a given depth, it is apparent that if a vessel is equipped with a device which will accurately measure and record the pressure at the lake or river floor, the exact depth can readily be determined. This is done with a hollow sounding line which has a clear opening from the air supply to the lower end. If air is forced through this tube or line while the lower end is submerged in water, the pressure of air at the upper end will equal the pressure of water at the lower end. The pressure of water at the lower end as previously stated, bears a known relation to the depth, and the gages that measure the pressure at the upper end are so marked as to translate this pressure into a record depth of water expressed in feet.



INDICATING, RECORDING AND ALARM GAGES OF AUTOMATIC SOUNDING MACHINE INSTALLED IN PILOT HOUSE OF PASSENGER LINER GREATER DETROIT

The construction of the sounding machine is quite simple as can readily be seen by reference to the illustration showing the forward end of a steamer with the side partly cut away to show the placing of the several parts. The indicating, recording and alarm gages are shown at *B*. The sounding line drum with power for handling and the air compressor which is attached to the side of the drum are generally installed on the spar or main deck forward of the collision bulkhead. This part of the installation is shown at *C*. The exit or outlet pipe through which the sounding line is lowered into the water extends vertically from the sounding line drum to the outer shell of the steamer. The upper end of this pipe is constructed with a wide top which gradually reduces in size to a depth of about eight feet where it connects with a standard 4-inch tube and this continues down to within about three feet of the outer shell of the vessel where it connects with an especially constructed sheave box. The whole exit pipe is arranged so as to allow a free opening for the sounding line. This exit pipe is shown at *A*. The hollow sounding line shown dragging from

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



HOISTING DRUM FOR SOUNDING MACHINE INSTALLED ON LAKE PASSENGER LINER GREATER DETROIT

the steamer's bottom, as at *D*, is the unit subjected to the greatest wear and strain. At times it is dragged over the lake or river floor and comes in contact with various obstructions. Some of the recent records with this machine have shown unmistakable indications of wrecks that stand from 15 to 30 feet above the natural bottom.

The construction of the line may be understood by reference to the detailed illustration. The inner core of the sounding line is a rubber hose especially compounded to withstand the destructive action of air and water. This is shown at *E*. The rubber hose is primarily protected from collapsing by a series of steel ferrules and heavy compression springs as shown at *F*. Built over this compression armor and completely enveloping it, is an 18-strand cable covering, further protecting it and giving the line a tensile strength of approximately 70,000 pounds. This cable covering is shown at *G*.

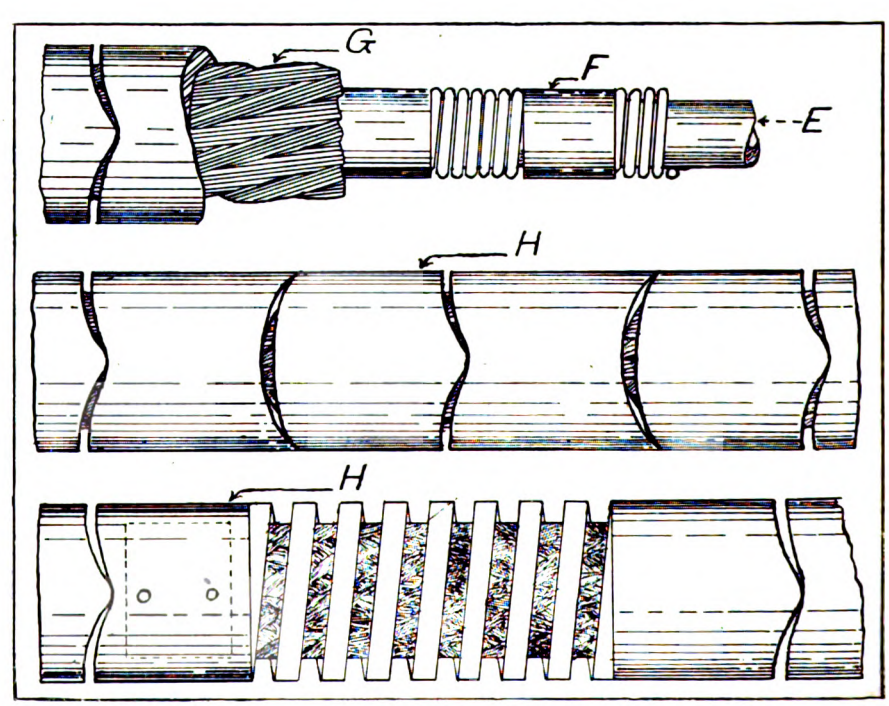
As a protection for this cable while dragging over the lake or river floor, a jacket of hard metal rings so constructed as not to interfere with the flexibility of the line are placed as shown at *H*. The approximate diameter of this sounding line is two inches and the standard length is five hundred feet.

The pilot house installation illustrated is on the Detroit & Cleveland steamer GREATER DETROIT. It shows the four gages that make up the entire indicating, recording and alarm system. The alarm gage is so constructed as to indicate the depth of water in feet and at the same time carries an electric contact point that may be set to give an alarm at any desired depth. This makes it impossible to enter shallow water without knowing it and at the same time avoids the necessity of continually watching the indicating gages.

Another illustration shows on the main deck of one of the new Detroit & Cleveland steamers, a steam driven drum on which is wound five hundred feet of 2-inch sounding line. Attached to the same bed plate is the air compressor. This part of the equipment is either steam or electrically driven and is directly connected in each case. The other illustration shows the cast steel sheave box that forms the lower end of the exit pipe. This box carries three steel sheaves that are placed in succession from the inner end out in such a way as to form a roller surface over which the sounding line passes when in use.

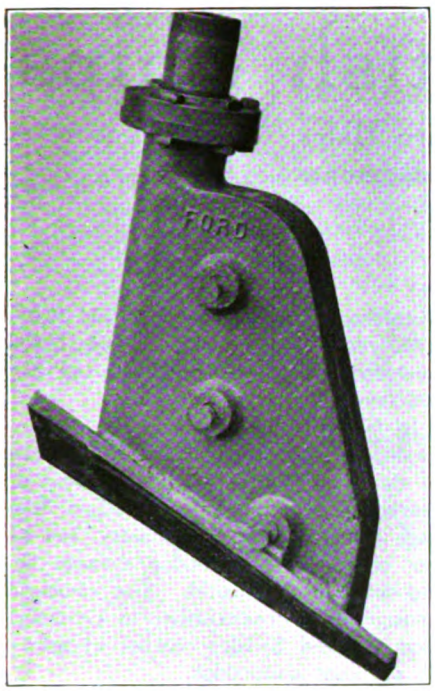
The sounding machine, being entirely under cover, is not affected by snow, ice or other weather conditions and does not require any member of the crew to be exposed at any time. To start the sounding machine, it is only necessary to start the air compressor. This is done from the pilot house and as soon as the compressor is in operation, a continuous flow of air passes through the tube system which connects the air compressor with the sounding line.

To explain the operation more clearly, the air compressor, located on the main deck near the sounding line drum, is connected to the pilot house with a system of copper tubing through which the air passes and connects with the indicating gages. From this point, the air returns to the sounding line entering the inner end of the sounding line through a swivel shown in the end of the drum shaft. To this shaft, the inner end of the sounding line is attached and through it the air circulates to the outer end. In this way, one continuous air passage is formed. At any time when the air compressor is working, the sounding line may be lowered and what ever pressure of water the line sinks to will be shown on gages in the pilot house.



SOUNDING LINE IS OF SPECIAL DESIGN AND CONSTRUCTION TO GIVE STRENGTH

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



CAST STEEL SHEAVE BOX THROUGH WHICH SOUNDING LINE IS LOWERED INTO THE WATER

If the steamer is sailing in deep water and the sounding line does not reach the bottom, the depth of the sounding line will vary with the speed of the steamer. Once that relationship is determined for a particular length of sounding line, the speed of the steamer can be accurately determined.

The moment the steamer approaches a shallow spot and the end of the sounding line begins to touch the bottom, the electrically equipped alarm gage will immediately give warning that the water is shoaling and the record of the depth in feet appears on the gage. Just as long as the line drags on the bottom, a picture of the floor of the lake or river is virtually painted before the eyes of the officer in charge. All that remains to do to secure this continuous sounding is to keep the circulation of air passing through the sounding line.

The reproduced chart, taken from the first trip of the steamer GREATER DETROIT from Detroit to Buffalo, was started near Bar Point and stops near the harbor at Buffalo.

What is considered an experiment will shortly be tried by Seattle shipping firms when the 3500-ton steel steamer EL ABETO leaves for Philadelphia with a 4000-ton wooden barge in tow. The steamer will have 2,000,000 feet of lumber and the barge will carry 2,500,000 feet. The latter vessel is a reconverted shipping board hull, equipped for the rapid handling of lumber. Previously, no attempt has been made to tow lumber laden vessels to the Atlantic from the North Pacific.

Ask New Bids on Altered Matson Liner

Bids will be asked soon on revised plans for the big passenger liner to be built for the American-Hawaiian Steamship Co. and turned over to the Matson Navigation Co. A bid of $4,792,000 from the William Cramp & Sons Ship & Engine Building Co., Philadelphia, was accepted a few months ago. Changes in the plans have since been made at the request of the navy department and shipping board. William F. Gibbs, naval architect, who planned the LEVIATHAN reconditioning, was retained by these government departments to make changes which increased the Matson liner's passenger capacity from 500 to 680, her beam by 8 feet, her displacement by 4050 long tons and gives her a speed of 23 knots. The changes are designed better to adapt the vessel for auxiliary cruiser service in time of war.

These revisions, according to an announcement by W. P. Roth, vice president and general manager of the Matson company, brought an estimated increase in cost of more than $1,250,000 or a total of more than $6,000,000 for the liner. The Matson directors decided to call for new bids.

As redesigned, the express liner will be 582 feet long, 83 feet beam and will displace 22,050 long tons. Horsepower will be 25,000. Her beam will be greater proportionately than on any existing liner and with bilge keels 36 inches deep will give her great stability. She will make the San Francisco-Honolulu run at 21 knots in 4½ days.

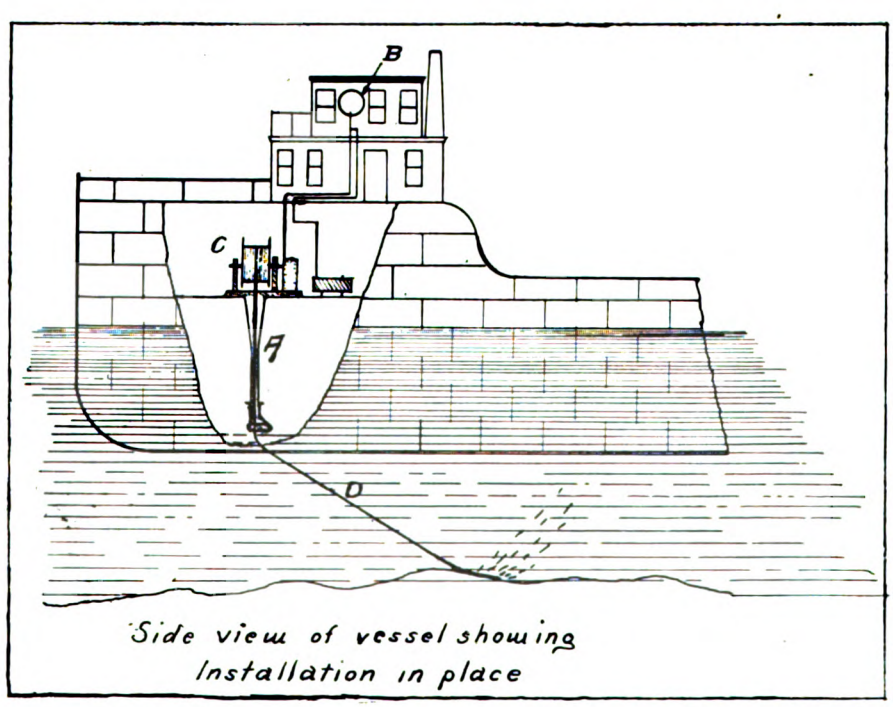
A maximum of 680 first class passengers will be accommodated in 270 staterooms. Of these rooms, about 150 will have private bathrooms or lavatories and showers. Public rooms will include a library lounge, ballroom lounge, smoking room and veranda, dining saloon for 500 passengers at one sitting and 600 if necessary, a swimming pool and gymnasium. Telephone and radio telephone systems will be installed.

Convert Tanker To Oil Electric Drive

The Atlantic Refining Co., Philadelphia, has awarded the contract to the Bethlehem Shipbuilding Corp., for converting the steam driven tanker ANAHUAC to oil engine-electric drive. She has an overall length of 180 feet, breadth of 31 feet, molded depth of 17 feet and a capacity of approximately 10,000 barrels.

The new propelling machinery will consist of two 225 horsepower, Ingersoll-Rand, direct injection oil engines direct-connected to 155 kilowatt, 125 volt direct-current generators. Both the generators and the single 250 volt direct-current propelling motor, which is rated at 375 horsepower at 120 revolutions per minute, will be furnished by the General Electric Co. This propelling equipment is similar to that installed in the Van Dyke tugs I, II and III which were recently placed in service.

Converting the ANAHUAC from a steam to an oil engine-electric driven tanker will be done at the Harlan plant of the Bethlehem corporation located at Wilmington, Del. The refining company will have five oil-electric vessels.



HOW AUTOMATIC SOUNDING MACHINE RECORDS WATER DEPTHS

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Grain Trade Aids British Ships

Big Demand for Tonnage from North America Helps Vessels; Review of Third Quarter Developments

BY VINCENT DELPORT
European Manager, Marine Review

ACTIVITIES in the British ports during the third quarter were fairly maintained, in fact to some extent July was the busiest month of the year. However, strong indications of a considerable revival are not in evidence and entrances and clearances of vessels during the month of August showed a small decline when compared with the two preceding months. But this may be only a seasonal drop.

In the first eight months of this year, 20,203 British vessels of 23,750,827 gross tons entered British ports, together with 14,908 foreign vessels of 11,961,713 tons, making a total of 35,111 vessels and 35,712,540 tons. The monthly average at the close of August was in excess of the average indicated three months previously both for British and for foreign vessels, which shows that even during the summer months the movement of British vessels has grown.

The number of clearances has also improved in comparison with the figures registered by May 31. For the first eight months of this year, 26,833 British vessels of 27,251,492 tons cleared from British ports, together with 16,777 foreign vessels of 15,737,753 tons, aggregating 43,610 vessels of 42,989,245 tons.

In the corresponding period of 1923, the total number of vessels which entered British ports was 31,966 totaling 32,918,172 tons, and the number of vessels which cleared British ports amounted to 45,713, totaling 46,503,426 tons. In the corresponding period of 1922 the figures were respectively 26,066 vessels of 27,998,499 tons and 35,142 vessels of 37,553,739 tons. A slight drop from 1923 but a good gain over 1922 is thus shown.

British Coal Exports Dropping

Although freight rates had dropped in August to such a point that certain shipowners were contemplating laying up their boats, the freight market improved considerably in the latter part of September. This was mainly due to the great demand for grain tonnage from the northern American ports for the European continent. This demand aided the shipping situation to a large extent.

The index number of shipping freights compiled by *The Statist* up to Aug. 31 shows a continuous drop since March up to July when the lowest point in the year was reached with 27.4 rising to 27.8 for August. The September index number is expected to show a further and more considerable rise.

The bulk of exports from Great Britain still shows a falling off as compared with last year, but the statistics for August indicate the decline is losing strength although a slight decrease was still shown in comparison with the preceding month. The falling off was still due particularly to iron and steel products and to coal, the latter commodity being the most important factor. The total exports of coal from Great Britain in the first eight months of this year were 41,693,690 tons compared with 53,156,546 tons in the corresponding period of 1923 and 38,393,844 tons in 1922. The average monthly exports at the end of August were slightly less than three months previously.

Shipbuilding Drops Slightly

The report from Lloyds Register of Shipping indicates that shipbuilding during the third quarter has decreased in contrast with the figures registered on June 30. However, it can still be said that in comparison with 12 months ago, shipbuilding in Great Britain is stronger. It is interesting to find that out of 737 vessels which are under construction in the world, 337, or about 46 per cent, are being built in Great Britain and Ireland.

For the quarter ended in September, 1,468,408 tons were under construction in Great Britain and Ireland. This is about 48,000 tons less than at the end of June, but is still 197,000 tons in excess of 12 months ago. The average tonnage under construction in the year preceding the war was over 422,000 tons more than at present. During the last quarter 252,745 tons were commenced in Great Britain against 375,210 tons during the second quarter. The tonnage launched during the three months ended Sept. 30 was 360,219 tons or 4299 tons less than in the previous quarter when the highest mark was reached during the last two and three quarter years.

A point of interest is the increasing number of motorships which are being built not only in Great Britain but the world over. The tonnage of motorships now under construction in the world is nearly 58 per cent of the steam tonnage, including a number of large units, 85 motorships being between 5000 and 10,000 tons, seven between 10,000 and 15,000 tons and seven between 15,000 and 22,000 tons .

In Great Britain, the tonnage of motorships under construction at the end of the third quarter was 387,670 tons or nearly 36 per cent of the steam tonnage being built in that country, and 41 per cent of the motorship tonnage being built in the world. The combined tonnage under construction in Germany, Denmark and Sweden consists of nearly 78 per cent motorships.

Great Britain still leads the pace in the construction of large units. In the tonnage building in the world at this time, are 35 vessels of between 10,000 and 20,000 tons each and eight of 20,000 tons and upward; 20 out of the 35 and all the larger vessels are being built in Great Britain and Ireland. The largest steamer recently built in Great Britain was a 28,000-ton liner for the Holland-America line which was recently launched by Harland & Wolff.

The above figures reveal the shipbuilding trade in Great Britain shows signs of activity and this is confirmed by orders which have been received during the past few months by certain plate mills. However, it can not be denied that the shipbuilding industry is far from being in its normal condition. Also it is claimed that shipbuilders are working at a loss. This is ascribed mainly to high wages, short hours and heavy transportation charges.

New Liners Launched

Shipbuilders also are disturbed by the number of orders captured by foreign yards which are in a position to work at lower costs. This also applies to repair work. This point was particularly brought to light by Sir George B. Hunter, chairman of Swan, Hunter & Wigham Richardson, Ltd. Alluding to an order for six oil tankers which the Shell Transport & Trading Co. had placed in Holland, Sir George Hunter said that there was a difference of about 12½ per cent between the Dutch tenders and the lowest British tender. These orders taken on the British market by foreign yards are naturally distressing the British shipbuilders.

The situation among ship owners is more satisfactory and a number of com-

Generated on 2024-07-26 06:15 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

panies have been in a position to declare dividends, although in some cases these were partly taken from reserve funds.

A certain number of shipping companies have launched liners embodying new features. The motorship SWANLEY built by Barclay Curle & Co., Whiteinch, Glasgow, has completed her maiden voyage from Cardiff to Colombo. She is the first vessel to be fitted with British made, double-acting engines. The new liner of the Cunard Co., the AURANIA, also sailed from Liverpool on her maiden voyage to New York. A new liner, the RANPURA, has been launched for the Peninsula & Oriental Co. and a new Orient liner, the ORONSAY, was launched in the middle of August. The ORAMA, a sister ship to the ORONSAY, is nearly completed and is due to sail for Australia on Nov. 15.

The board of trade has laid before parliament new rules with respect to the life-saving appliances to be carried on board ship, and many changes are recommended to increase the safety of passengers.

Following certain complaints by foreign shipowners relating to the absence of modern loading and discharging facilities in British ports, which was particularly noticeable in the latter part of 1923, a port facilities committee was formed which reported that the strike of dock workmen in 1923 increased congestion in British ports and that difficulties were also encountered in view of the increase in trade and the reduced hours of working. Recommendations were offered by the committee in order to obviate these difficulties in the future by increasing railway facilities and by improving methods of loading and discharging.

What the British Are Doing

Short Surveys of Important Activities in Maritime Centers of Island Empire

QUICK work was done a short time ago by British shipbreaking firm of Cox & Danks in the salvage of the first German destroyer to be dealt with in Scapa Flow. This was one of the vessels scuttled by the Germans. Special lifting tackle had been designed which in three hours brought the ship to the surface and two hours later the tugs had deposited the destroyer aground 200 yards from the shore. Further efforts are being made to bring the ship nearer land to facilitate breaking up.

* * *

A LONDON firm of contractors has received the order to construct a new Mersey dock at Bromborough for Lever Bros. The dock will cover 155 acres. Nearly three miles of heavy retaining bank and dock walls will have to be built with two jetties and extensive railway sidings. The cost including that of dredging and the dock gates will exceed £500,000 to which will be added expenditure on train sheds and other equipment.

* * *

MUCH satisfaction is felt in British shipbuilding circles over the continued shipbuilding orders from the Canadian Pacific railway. Recently the PRINCESS KATHLEEN was launched at Clydebank having been built by John Brown & Co. Two other vessels are now under construction in connection with the service on the triangular road from Vancouver to Seattle. They are 368 feet in length, 60 feet in breadth and 28 feet, 9 inches in depth to the upper deck. Accommodation is provided for total of 317 first-class passengers. The disproportionate width of the vessels from the British point of view has frequently attracted attention. But the railroad attaches great importance to the provision of a wide promenade deck, because of the greater comfort thereby furnished to the passengers. Suggestions have been made that the same principle should be adopted in the construction of British cross-channel steamers.

The Fairfield Co. of Glasgow is among the favored Canadian Pacific builders having built in 1913 the EMPRESS OF ASIA, 570 feet in length, and since then the EMPRESS OF CANADA, 630 feet, and the MONTROSE, 550 feet. The METAGAMA in 1915 and the MELITA and MINNEDOSA, both, in 1918, were built by the same company. John Brown & Co. constructed the MONTCALM and the MONTCLARE in 1921 and 1922 respectively. Vessels for the company have also been built at Barrow and Newcastle on Tyne. The value of the orders placed by the railroad now runs into many millions.

* * *

ORDERS for 300 20-ton coal cars have been placed. They will convey coal from Welsh collieries in connection with shipments at Port Talbot. They are intended to be used mainly for the anthracite export to Canada and America.

* * *

IN VIEW of the extensive adoption of oil burning, the misgivings expressed by Sir Frederick W. Lewis, presiding at the meeting of Furness Withy & Co. are of interest. Sir Frederick admits the great value of the diesel engine in the matter of reduced fuel consumption, increased ship space and lower labor costs but on the other hand he calls attention to the heavy initial outlay, while the rise in oil prices has been so serious that many vessels fitted for burning oil have been reconverted to coal. He points out the importance of establishing oil supply stations which to be profitable must have a large amount of business to do in supplying oil to vessels. Sir Frederick had a word to say in regard to a recent prophecy of a coming shipping boom. In that case, well known economist recommended e terprising owners to build ships withot delay. Sir Frederick hoped that th gentleman was right, but remarked that the immediate outlook in the freight market was depressing.

* * *

LLOYDS shipbuilding register for the quarter ended Sept. 30 shows that at present 35 vessels of between 10,000 and 20,000 tons each and eight of 20,000 tons and upward are under construction. Twenty out of the 35, and all the largest vessels are building in Great Britain and Ireland. The tonnage of vessels now building in the world to be fitted with internal combustion engines amounts to 939,899 tons while the tonnage of steam vessels under construction is 1,621,569 tons. The motor tonnage thus equals nearly 58 per cent of the steam tonnage.

* * *

COMPLAINTS are frequently made of the unprofitable character of shipbuilding. Sir G. B. Hunter, chairman of Swan, Hunter & Wigham Richardson Ltd., presiding at the annual meeting of the company, said there had been an ed for total of 317 first-class passengers.

Generated on 2024-07-26 06:16 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

and that out of the 16 undertakings owned by the firm only two had made any profit on their work in 1923. In a recent report, the company gives the prices and costs of nine vessels built at Wallsend shipyard which show a total loss of £8630 on the contract.

Several examples have been quoted lately of contracts being placed abroad because of the lower foreign prices. A Newcastle shipowning firm announced that it had lately placed orders in Holland for three ships. The lowest Dutch price was £38,500 and the lowest British price £50,000. The British could not guarantee delivery owing to the boilermakers' strike. Among the reasons assigned for the foreign success are cheaper materials, lower wages, no trade union restrictions and less taxation.

* * *

SIR ALFRED YARROW, a well known British shipbuilder who has lately been visiting Australia, said on his return "shipbuilding orders show that a trade improvement is in sight but of course it must be slow. There is no doubt that the construction of the diesel engine at this juncture is a great asset to the shipbuilder. The diesel is more economical to run than steam, and it is fortunate that the change from steam to diesel should be possible at a time when things are so slack."

* * *

THE Northumberland Shipbuilding Co., Ltd., of Howden-on-Tyne, has recently completed a steamer, to the order of the Pontypridd Steamship Co. of Cardiff, which has some special features. She is one of two specially designed steamers of the shelter deck type carrying about 8200 tons deadweight. The length is 400 feet, the breadth 53 feet and depth to shelter deck 35 feet 5 inches. The design and specification of the vessel embody the latest appliances for loading and discharging cargoes. A large number of winches and a specially arranged system of derricks and derrick gear are provided. Telemotor steering gear has been fitted with midship control. In addition, a bronze propeller is used.

* * *

SHIPBUILDING industry benefits considerably from government guarantees under the trades facilities acts which the treasury has stated its willingness to give to the end of June up to a total of £47,629,645. Seventeen of the new guarantees are with respect to the construction of new vessels, particularly on the Clyde. The largest of these sums is £1,600,000 to the Anchor Line Ltd. for constructing three vessels at Govan and £850,000 to the Pacific Steam Navigation Co. for purchasing plant and materials and constructing vessels at Belfast. Sunderland and Wallsend-on-Tyne are also included in the list.

Scandinavians Build Up Merchant Fleets

The Danish merchant marine at the end of June, 1924, was about the same size as on the corresponding date last year, 1,025,000 tons, says a report to the department of commerce from Commercial Attache Sorensen at Copenhagen. During the year 1923, ships aggregating 26,000 tons were built in Denmark, 5000 tons were built abroad, and 25,000 tons were bought abroad. During the same period, four ships, totaling 9,700 tons, were built in Denmark for foreign acount. Sales to foreign countries amounted to 74,000 tons, of which 50,000 tons represented steamers of an average age of 25 years. Four steamers and six sailing craft, totaling 7400 tons, were lost as the result of wrecks.

During the first six months of the current year, tonnage increased 51,000 tons, of which 39,000 tons represented new building and 22,000 tons older ships purchased abroad. The gross decrease was 34,000 tons, of which 30,000 tons were sold abroad. At the end of the first half of 1924, the Danish merchant marine consisted of 626 steam and motorships, with a tonnage of 979,000 and 147 sailing vessels of 45,000 tons. At the close of the period, 60,000 tons were under construction in Danish yards, of which 13 were motorships of 43,000 tons.

Quality of Norway's Fleet Improved

The Norwegian merchant fleet is now practically the same size as before the war, but undoubtedly is of better material. Old steamers which were lost during the conflict and the sailing fleet, of which only about 100,000 tons remains have been replaced with up-to-date steam and motor craft. At the end of 1914, Norway had a fleet of steam and motorships aggregating 530,000 tons not more than 5 years old; at the present time this class totals 900,000 tons. Norway's share of the world's tonnage, which, before the war, amounted to 4.3 per cent, has now dropped to 3.8 per cent.

Swedish Tonnage Increases

During 1923, the Swedish merchant fleet increased by 84,000 tons, of which 22,000 tons were built in Sweden, 7000 tons built abroad, and 57,000 tons represented purchases abroad. During the year ships aggregating 14,000 tons were sold to foreign countries, and about 13,000 tons of shipping were lost.

In the first half of 1924, ships totaling 18,000 tons were built in Sweden and 26,000 tons were bought abroad. A total of 26,000 tons of shipping passed out of Swedish hands, of which 22,000 tons were sold to foreign countries. At the end of the same period, the Swedish merchant fleet consisted of 1191 steam and motorships with a tonnage of 1,175,000, and 236 sailing vessels of 63,000 tons. At the end of July, this year, 52,000 tons of shipping were under construction in Swedish yards, of which 12 were motorships totaling 45,000 tons.

Naval Architects Plan Interesting Program

The Society of Naval Architects and Marine Engineers will hold its thirty-second general meeting in New York on Thursday and Friday, Nov. 13 and 14. The meetings will be at the Engineering Societies building, 29 West Thirty-ninth street. Professional sessions will start at 10 o'clock each morning. The council of the society will meet at 3 o'clock on the afternoon of Nov. 12.

The annual banquet of the society will be held on Friday evening Nov. 14 at the Waldorf-Astoria hotel. A reception will be held immediately preceding the banquet.

The following papers have been prepared for presentation at the meeting:

Thursday, Nov. 13

1. "Aeronautics in Naval Architecture," by Commander Jerome C. Hunsaker, C. C., U. S. N., member.
2. "Hydraulic Seagoing Hopper Dredges," by Capt. W. D. Styer, U. S. A., visitor.
3. "Self-Unloading Bulk Cargo Vessels of the Great Lakes," by Henry Penton, member, and Prof. Herbert C. Sadler, council member.
4. "Comparison of Model Propellor Experiments in Three Nations," by Rear-Admiral David W. Taylor, C. C., U. S. N., Ret., honorary vice president.
5. "The Extent of Cavitation in U. S. Scouts and Destroyers," by Capt. Ernest F. Eggert, C. C., U. S. N., visitor.
6. "The Wake and Thrust Deduction of Self-Propelled Single Screw Models," by Prof. Edward M. Bragg, member.

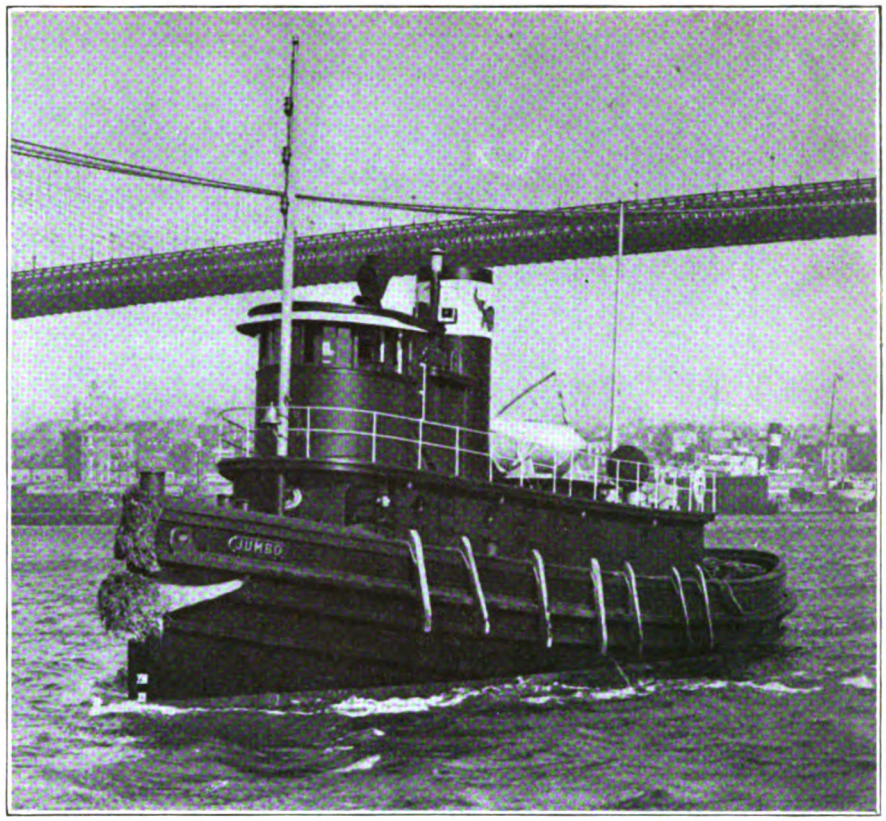
Friday, Nov. 14

7. "The Design and Construction of Refrigerated Ships," by Llewllyn Williams, member.
8. "Application of Fuel Conservation and Engineering Performance Standards of Shipping Board Vessels," by Carl J. Jefferson, member.
9. "Scrapping Warships," by Commander Henry E. Rossell, C. C., U. S. N., member.
10. "Trials and Operation of Motorship CUBORE," by Arthur B. Homer, member.
11. "Problems in Connection with Conversion of the Hog Island Steamer SEEKONK to a Motorship," by James C. Shaw, member.
12. "A Diesel Electric Tugboat," by Frank L. Du Bosque, vice president.

Generated on 2024-07-26 06:16 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Diesel Tug Cuts $22,000 Off Annual Expenses

BY A. H. JANSSON



BIG DIESEL DRIVEN TUGBOAT

PRACTICAL performance in actual service is the best test of a new departure in motive power. During 10 months of continuous and arduous service, the diesel engined tugboat JUMBO of the Cornell Steamboat Co. has demonstrated in such a test that it is the equal of a steam towboat in all towing work from maneuvering in and out of slips shifting lighters to hauling long heavy tows. In long heavy tows, it shows superiority to the steam tug as full power can be maintained consistently and without effort. At the same time the total operating cost is less than one-half that for an equivalent powered steam towboat.

In the fall of 1923, the New London Ship & Engine Co. decided to equip a large tug with one of its 600 brake horsepower direct reversible, diesel engines, on its own account. A bare wooden hull, 100 feet long, originally built for the United States shipping board, was bought in New York in August, 1923 and taken to New London to the yard. The company equipped the tug complete including fittings and furniture and did all of the work in its own plant. The accompanying illustration shows this tug on her arrival in New York in the middle of December, 1923. Hull dimensions and main and auxiliary machinery particulars are noted in Table I. The engine as located in the tug is illustrated with attached compressor and operating gear shown in the foreground.

From the time of arrival in New York, this tug has been constantly employed in useful work; at first under charter by the Transmarine Lines and the Cornell Steamboat Co., for general harbor service, and since April 1, after purchase by the latter company, in service on the Hudson river, from New York to Newburgh and to Troy, hauling at one time an average of 16 barges, each loaded with 550 tons of gravel, stone and brick.

Influence of Tides

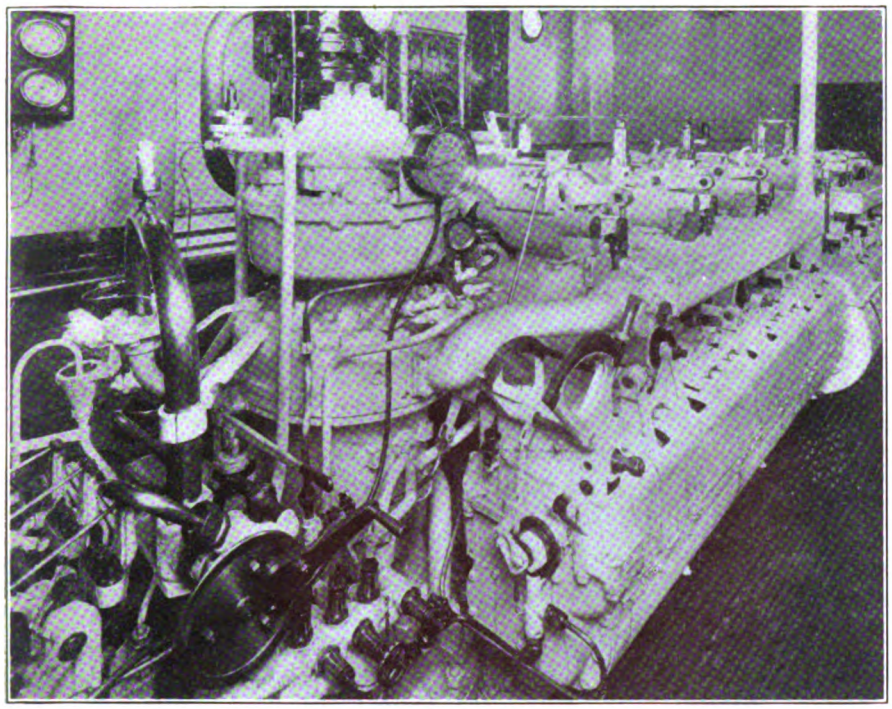
The loaded tows between New York and Point Clinton, a distance of 70 miles, are delivered in approximately 18 hours or in the space of time necessary for three tides. In this service the diesel engined tug shows to particular advantage on account of its long radius of action without refueling. The strong tides experienced in the Hudson must be rigidly taken into account for efficient towing. A tow should leave Point Clinton at the beginning of an ebb tide, arriving in New York at the end of the next ebb, thus having had 12 hours favorable tide and only six hours of contrary tide. By the same token, on arrival in New York if the tug is ready to start back at once it can begin its tow up river at the beginning of a flood tide and will then arrive in Point Clinton at the end of the next flood and in so doing will encounter only one contrary tide. The coal burning steam tugs must stop to refuel frequently and, therefore, lose valuable time which interferes with the regularity of this schedule. The accompanying diagram will serve to illustrate the importance of closely following the tides and the approximate distances covered in the same period of time with and against the tide.

A tow between New York and Point Clinton starting out on the wrong tide would arrive at its destination at such a time that immediate return could not be made without encountering the greater part of two contrary tides on the way back. The diagram illustrating the effects of the tides is laid out on the basic fact that the time for the tow under consideration between Point Clinton and New York is 18 hours and on the assumption that the average effect of the tide amounts to 1.7 miles per hour. If the effect of the tide is taken at 2.00 miles per hour, the distance covered on a favorable tide would be 31 1/3 miles and on contrary tides 7 1/3 miles. On the other hand if the effect of the tide is taken at 1.50 miles per hour, the distance covered on a favorable tide will be 29 1/3 miles and on a contrary tide 11 1/3 miles. In any case, by choosing the hour of departure to correspond to a favorable tide there results a net gain due to the assistance of the tides making it possible to cover the total distance in less time than if operating in still water. The diesel engined tug can continually take advantage of favorable tides because it is ready to turn about at once without refueling.

From practical operating data, it is possible to make a detailed comparison in operating costs between a tugboat of the size and type of power of the JUMBO and a steamdriven towboat of equivalent power. Such comparison is given in the accompanying Table II.

The diesel engined tug shows a sav-

Generated on 2024-07-26 06:16 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



ENGINE ROOM OF THE TUG JUMBO SHOWING 600 BRAKE HORSEPOWER DIESEL ENGINE, DIRECT REVERSIBLE, OPERATING AT 200 REVOLUTIONS PER MINUTE

ing in operating costs of $21,876 per year for equivalent or superior service. All owners and operators of tug boats can not fail to be greatly impressed with so substantial a saving. Of course, the diesel engined tug will involve a greater capital outlay than the steam tug. What this additional capital outlay will be, is a matter of negotiation between the owner and the engine builder. Suppose, however, that the additional capital outlay for a tugboat, of the size on which the above saving in operating costs is realized, amounts to $20,000. After deducting 5 per cent interest and 5 per cent depreciation on this amount per annum, there remains $19,676 of additional revenue a year.

Ready For Service

In addition to this substantial saving in operating costs, the diesel engined tug has other practical advantages over the steam tug. The diesel engined tug can get under way and be placed in service at a moment's notice without any preliminary stand by preparation, such as getting up steam. An instance of the great importance of this characteristic in an emergency may be mentioned. A valuable tow in the Hudson river off New York, broke adrift, and was saved by the prompt assistance of the diesel engined tug JUMBO. This tug at the time of the accident was tied up at her berth and had on board only a steam tugboat engineer, who was there as an observer to learn how to operate the engine. The engineer immediately secured a steamboat captain to steer the tug and the two at once went out to midstream and saved the tow. As this happened on a Sunday, no steam tug was prepared to act with the promptness required by the circumstances.

This instance further illustrates the simplicity of operation and the independence of help to fire boilers. Immediate and full power was available to the engineer in charge by merely manipulating the necessary starting and operating valves. The elimination of the labor of firing not only saves the expense of such labor but also removes the greatest source of friction and discontent in operation. By reducing hard physical labor in the engine department, a higher average of discipline and deportment can be maintained and this will make for a happy ship, as the saying goes, the importance of which in overall efficiency is thoroughly recognized by all really successful operators.

It is easy enough to understand that conservative, practical tow boat owners and operators, all their lives accustomed to, and thoroughly familiar with the steam tug, should be reluctant to forsake the old reliable steam engine for the comparatively strange and new diesel engine. All such, however, can not fail to be impressed with actual performance. It is one thing to write of performance as predicted in the prospectus of the manufacturer and an altogether different thing to record personal observations on board during practical operation. The writer had the privilege of such practical observation on the diesel engined tug JUMBO during a part of an ordinary working day. The tug ran light from an uptown New York pier to the Brooklyn shore where a canal boat lying alongside of a ship was nosed out of the slip, the entrance to which was greatly restricted by the large twin screw ship itself and a car float lying across it. After clearing the slip, the canal boat was towed rapidly across the harbor up the Kill Van Kull and brought safely and quickly to its destination alongside the end of a pier in Bayonne. No steam tugboat could have performed this service more quickly or efficiently. The constant maneuvering necessary to do this particular job was accomplished with precision and promptness and without the slightest distress to the engine or danger of loss of starting air. In this connection, the fuel needle lift control mechanism which makes

TABLE I

Characteristics of Tug

HULL PARTICULARS

Wood	
Length, feet	100
Beam, feet	26
Draft forward, feet	10
Draft aft, feet	12
Speed, light, miles per hour	13½

MAIN MACHINERY

1—6-cylinder, 4-cycle, air injection, direct reversible oil engine, New London Ship & Engine Co. type.

Stroke, inches	24
Diameter, inches	16½
Brake horsepower	600
Revolutions per minute	200

Single screw

Bronze propeller, three blades

Diameter, feet, inches	7 6
Pitch, feet, inches	5 9
Fuel capacity, gallons	14,000

Radius of action 425 hours at full power

AUXILIARIES

Exide type storage batteries, 110 volts 128 amperes, to furnish power for lighting, for auxiliary pumps, steering gear and gypsies.

1—5 kilowatt Electric Dynamic type generator, belt driven from propeller shaft for charging batteries.

1—Sturtevant type fan blower.

1—7½ brake horsepower Mianus type engine, direct-connected to electric dynamic generator and to multistage New London type high pressure emergency compressor.

1—3-inch x 4-inch fire and bilge pump.

1—2-inch x 3-inch fuel transfer pump.

1—3-inch x 4-inch force feed lubricating pump.

1—5-inch x 8-inch engine circulating pump.

Above pumps of W. & B. Douglas type. These pumps are operated by silent chain drives from sprockets on propeller shaft.

1—spare fire and bilge pump, 1 spare fuel transfer pump and 1 spare force feed lubricating pump,all driven from countershafts by Electro Dynamic type motor.

1—spare engine circulating pump, Worthington centrifugal type, motor-driven.

1—12 feed McCord type oiler for main engine cylinders, driven from attached fuel pump mechanism.

1—De Laval type, lubricating oil separator.

1—steering gear driven by a 2-horsepower motor.

6—starting air bottles.

1—tachometer, direct reading, Johns-Manville type.

1—steel tube mercury thermometer of Schaeffer & Budenberg type for measuring exhaust temperatures.

Gages of Ashcroft type.

Generated on 2024-07-26 06:16 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

TABLE II

Comparative Operating Costs of Steam Driven and Diesel Engined Tugs

Two Shifts Daily—28 Days a Month

	Steam Tug (750 i. h. p.)	Diesel Engined Tug (600 b. h. p. or 750 i. h. p.)
Average number hours in operation per day..	16	16
Lay time per day, hours	½	½
Hours running time engine per day	15½	15½
Fuel consumption per day	11*	400†
Fuel cost per day @ $6.25 per ton for coal and 5 cents per gallon for diesel oil	$68.75	$20.00
Cost per day of lubricating oil	$0.50	$2.00
Cost per month of fuel and lubricating oil ...	$1939.00	$616.00
Cost per year of fuel and lubricating oil	$23,268.00	$7,392.00
Hours fueling, watering and ashing per month	28	6
Cost of above item per month @ $12 an hour	$336.00	$72.00
Cost of above item per year	$4,032.00	$864.00
Wages of two firemen @ $90 a month per year	$2,160.00	
Victualling for two firemen, $2 a day, per year	$672.00	

*=tons of coal.
†=gallons of oil

Summary of Operating Costs for One Year

	Steam Tug (750 i. h. p.)	Diesel engined Tug (750 i. h. p.)
Cost of fuel	$23,268	$7,392
Cost of fueling, watering and ashing	$4,032	$864
Cost in wages, two firemen	$2,160	
Cost in victualling, two firemen	$672	
Total for above items	$30,132	$8,256
	$8,256	

Total saving in operating costs for oil engined tug $21,876.00

Note:—Due to heavy and light towing conditions, it is assumed that the diesel engined tug in the above comparison operates on an average of 75 per cent of full power. Only those items of operating expense in which there is a difference have been considered. All other items of operating expense are taken as the same for either type. Cost of boiler feed water was not taken into account.

possible a close adjustment of the fuel corresponding to varying speeds, a regular feature of this diesel engine, is of great importance in easy maneuvering.

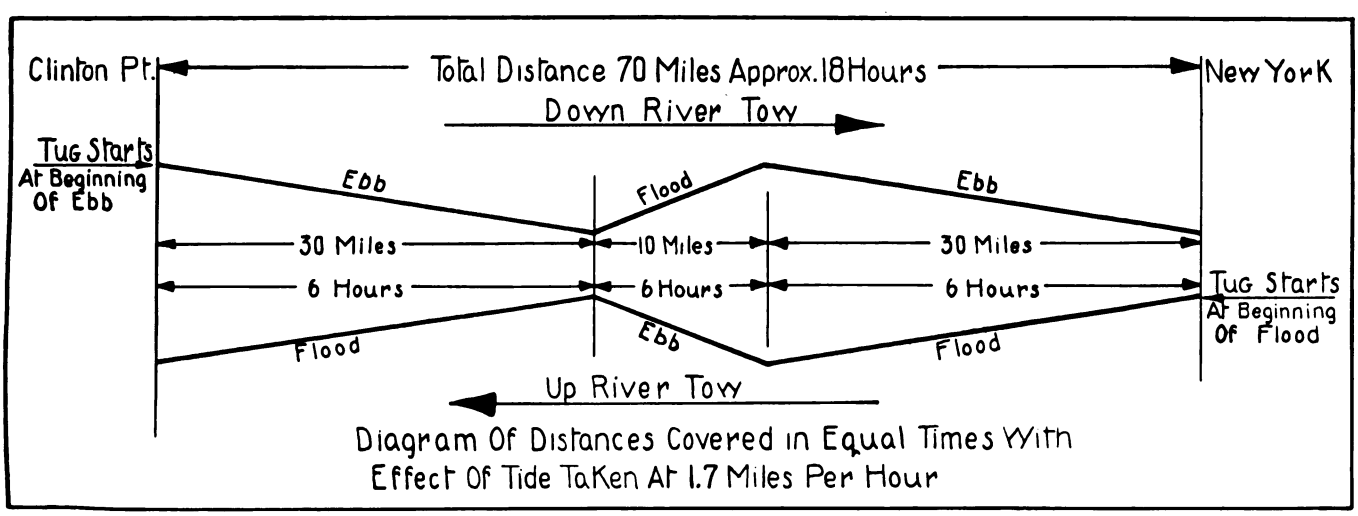
The cylinders of the diesel engine in the tugboat JUMBO were opened up for examination at the plant of the Cornell Steamboat Co., at Kingston, N. Y., on Oct. 14, 1924. No wear at all could be detected by careful measurements, and the cylinders were found to be in excellent condition. This was the first examination made since this tug went into active service in December, 1923. It should effectively dispose of any suggestions that there is any undue wear on the cylinders, due to a great deal of starting, stopping and maneuvering, when air is used.

Such then is the performance today of this tug after 10 months of continuous and heavy practical towing work. Both the captain, George McCabe, and the chief engineer, Calvin Beebe, old steam tugboat men, are enthusiastic over the performance of their charge and are quite certain that they can hold up their end with any steamboat of the same power in any type of towing.

Plan Two Motorships for Intercoastal Run

The International Mercantile Marine Co., New York, is reported to be considering plans for constructing two fast motorships for the intercoastal trade of its Panama-Pacific line. The liners, it is expected, will be combination freight and passenger vessels and probably will be built by the New York Shipbuilding Corp., Camden, N. J., which company is closely affiliated with the International company.

Tentatively, the two new liners will be 17-knot ships of approximately 14,000 gross tons and equipped with diesel engine. Nothing is yet known as to the type of diesel engine which will be used, whether double or single acting. However, the results obtained by the shipping board in its bidding will probably be watched with keen interest and will help to serve as a guide on the cost and reliability of the American built engine. These ships will have the most modern equipment, equaling that of transatlantic liners, and, in addition, will have special arrangements for transporting automobiles.



EFFECT OF TIDES ON DISTANCE COVERED BY HUDSON RIVER TUG BOAT

Generated on 2024-07-26 06:16 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Urge Certificates to Help Ships

Officers of National Merchant Marine Association Submit Interesting Plan for Study by Business Men

SOMETHING definite and new in the line of assisting a privately owned, American marine is being urged by the National Merchant Marine association. The main outline of the plan was announced publicly by the association last fall, but the detailed program as worked out by its legislative committee is just now being submitted to various business men and groups for analysis, criticism and improvement. The final plan is to be ready for submission to congress in December.

The association had in mind four main objects; legislation which would aid shipping both for commercial and naval purposes, aiding other industries at the time shipping was benefiting, making private ownership feasible despite higher operating costs and doing all this without subsidy or inroads on the treasury but actually at a profit. Also the possibility of a workable plan was studied, since so much marine legislation of the past few years has been ignored by the executive departments after becoming a law.

The feature of the plan of special interest is the issuance to importers and exporters, of goods moving in American bottoms, of certificates representing 40 per cent of the ocean freight charges, which certificates may be used in the payment of custom duties.

How Plan Would Work

An analysis of this plan by its advocates shows its method of operation.

With provisions made for the elimination of treaty barriers, the way would be clear for the application of preferential duties and tonnage taxes in favor of American ships. It is planned to have these operate in connection with the issuance of import and export certificates to users of American vessels. The chain thus formed would have the following links:

1. Amendment of the crippling provisions of our commercial treaties.
2. Increased customs duties on dutiable goods when brought in foreign ships.
3. An *ad valorem* customs duty on goods on the free list, if imported in foreign vessels.
4. Extra tonnage taxes on foreign vessels entering our ports.
5. Import certificates *on goods on the free list* when carried in American bottoms.
6. Export certificates on any goods of American growth, production or manufacture when transported in American vessels.
7. The above system of duties, dues and certificates to apply so long as not more than 60 per cent of our exports and imports combined are being carried in American vessels.
8. The export and import certificates to represent 40 per cent of the ocean freight on the goods carried in American vessels and to be negotiable, transferable and acceptable at face value in payment for customs duties.

It is to be expected that foreign and international interests, enemies of American shipping, will seek to claim that the certificate plan constitutes a subsidy. The contrary, however, is the fact. Not one cent will be paid out of the public treasury, and whatever reduction there may be in receipts of customs duties will be much more than offset by the increased revenues from discriminating duties and tonnage taxes, as will be shown.

Certificates Find Ready Market

The value of the certificates will not be limited to those paying customs duties. Importers of goods on the free list and exporters who may have no duties to pay, could sell the certificates either to importers at a slight discount, or to banks on the same basis, the latter in turn disposing of them directly to importers of dutiable goods. As these certificates would be negotiable and transferable and would have the government behind them, they would find a ready market.

The system followed in securing the certificates would be very simple, the importers and exporters affected merely presenting to the customs authorities a certified copy of their freight bill, and receiving in return a certificate representing 40 per cent of the freight. This system would be in force until the secretary of commerce certified that American vessels were carrying more than 60 per cent of the value of our combined imports and exports, and would be suspended only so long as they continue to carry more than the fixed figure, coming into force again as soon as our ships' share fell below that level, and thus acting as a stabilizer in maintaining an adequate merchant marine. At present, our vessels are carrying only about one-third of our commerce and it has been estimated that the efficient merchant marine volume of shipping under the American flag is sufficient to carry about half of our total foreign commerce. One result of the certificate plan, therefore, should be to increase the efficient tonnage, to bring new ships into the American merchant marine and to give employment to the languishing shipbuilding industry and other branches of production dependent upon it.

It will be noted that discriminating duties of 10 per cent will be imposed upon both dutiable and free goods when brought into this country in foreign vessels, as well as an extra tax of 10 cents per net ton on all entries of foreign ships. The import certificates, however, are limited to goods on the free list. Thus, there can be no lessening of the protection of American industries, such as might result through the remitting of 40 per cent of the ocean freight bill on goods which come into competition with our own products, and which might, therefore, be brought into this market at a cost that would enable them to be sold with serious effect upon our own industries.

The import certificates given on goods on the free list, however, represent practically exclusively raw materials and goods used in manufacturing, and would, therefore, lessen the cost of manufacturing to the mutual benefit of the producer, distributor and consumer. The manufacturer would also have an advantage in that he would receive, not only an import certificate on the raw material, but also an export certificate when he shipped a portion of his products to foreign markets, in American bottoms, thereby enabling him to meet foreign competition in foreign markets much better than at present.

Gain to National Treasury

How the agricultural interests would benefit under both forms of certificates is manifest. They would be aided by the import certificate on receipts of fertilizers, for instance, and, by the export certificate on shipments of grain. Every branch of the industry having to do with exporting would gain under the certificate plan.

It has been stated that instead of being a drain upon the treasury, the system of legislation proposed would add to the national revenue. How this works out financially can be shown by the records of the department of commerce. Those for the fiscal year ended June 30, 1924 will be used as being

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

the latest available, but figures for previous years also show strikingly the non-subsidy character of the plan proposed.

The figures for the fiscal year recently ended show imports and exports to have been as follows:

Imports	
Free	$1,748,000,000
Dutiable	1,330,000,000
Total	$3,078,000,000
Exports	
Domestic	$3,646,000,000
Foreign	55,000,000
Total	$3,701,000,000

Net Cost of Certificates

The total of free imports and domestic exports amounted to $5,394,000,000. If 60 per cent of these had been carried in American ships, the total value of the goods, on a percentage of which export and import certificates could be issued, would be $3,236,400,000. Figuring the freight cost at 8 per cent, the cost of carrying this 60 per cent by American vessels would be approximately $258,912,000. If these certificates were issued on the basis of 40 per cent of the freight bill, the total would be $103,564,800.

The total value of all imports for the fiscal year 1924 was $3,078,000,000. If foreign ships carried 40 per cent of this value, the amount represented would be $1,231,200,000. A 10 per cent duty on this would amount to $123,120,000, and this additional income brought into the treasury would be supplemented by extra tonnage taxes paid on foreign shipping.

During the 1924, the net tonnage of all vessels entering American ports was 67,655,000 tons. If 40 per cent of this, (27,062,000 tons), represented foreign shipping, and an extra tonnage tax of 10 cents per ton had been placed on these ships there would have been additional receipts of $2,706,200, making the total offset to the export certificates $125,826,200.

The final result, therefore, may be summarized as follows:

Increased income from:	
Discriminating duties	$123,120,000
Discriminating tonnage taxes	2,706,200
Total	$125,826,200
Reduction in customs duties as represented by value of export and import certificates	$103,564,800
Gain to treasury	$ 22,261,400

Why Plan Would Aid

What are the chief advantages of the proposed plan?

The following would be among the principal ones:

1. The system planned would be no draw on the treasury, but would result in increased revenues.

2. It would give direct benefits to American importers and exporters, manufacturers, farmers and other producers.

3. It would give greater employment to American labor.

4. It would benefit the American consumer by reducing production costs.

5. It would aid the American shipowners and ship operators, by bringing them greater cargoes, both outbound and inbound, and enable them to purchase ships from the government or build new ones, in order to supply the increased business.

6. It would give employment to American shipyards by creating this greater demand for American ships.

7. It would result in an increase in our foreign commerce by lowering marketing costs, and thus enable American goods to be laid down abroad more cheaply in competition with foreign producers, as well as by assuring permanent and dependable transportation services.

8. It would bring the development of American shipping to a point where the purpose of the Merchant Marine act of 1920 would be fulfilled through the creation of an American shipping carrying the greater portion of our foreign commerce and serving as an adequate naval and military auxiliary.

Other parts of the program provide for government employes and freight to use American ships; one-half of immigrants to use American ships; only vessels built in this country to receive American registry for foreign trade; a merchant marine naval reserve and call for the repeal of conflicting treaties, the method provided being one which it is said makes the enforcement independent of action by the President.

The plan has attracted quite a lot of interest and in some form is likely to appear in congress this winter.

ST. LAWRENCE RIVER, 35 CAR, AUTOMOBILE FERRY

With a low first cost fixed, the architect, Walter Lambert, developed unusual hull lines which called for only straight frames and but few furnaced plates. The ferry, JACQUES CARTIER, is 135 x 35 x 10 feet with 5½-foot draft. Built at Davie shipyard, Quebec, she is driven by two 80 brake horsepower Kromhout type oil engines giving an average trial speed of 10.66 miles

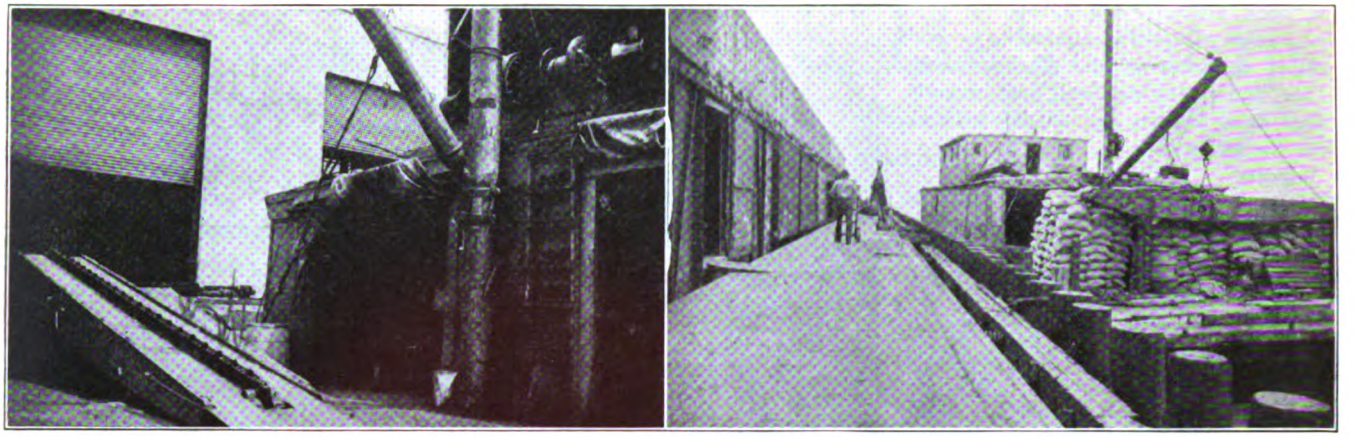
Opens Radio Station at Chicago

Shipping using Lake Michigan is especially interested in a new radio station opened by the Radio Corp. of America-Ohio Co., in the Transportation building, 608 South Dearborn street, Chicago. Modern equipment makes the station non-interfering with telephone broadcast reception. Chicago has not had radio station facilities since the war despite the needs of such service both by passenger and cargo vessels.

Bids will be received until Nov. 6 for constructing two large steel caissons for the government drydock now being built at Skinner's Cove, Victoria, B. C. The caissons are to be ship type, one 49 feet in height and 139 feet 4½ inches in length. The other will measure 46 feet by 138½ feet. The new dock is expected to be completed about the middle of 1925.

A radio compass of the Kolster type, supplied by the Federal Telegraph Co., San Francisco, has just been installed on the passenger liner PRESIDENT JACKSON. This is the second transpacific liner of the Admiral-Oriental line, Seattle, to be thus equipped, the other being the PRESIDENT MCKINLEY.

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



CHAIN CONVEYOR IS USED TO HELP UNLOADING OF SUGAR BARGES

Handle Sugar by Special Type of Conveyor

Large quantities of sugar are delivered from the refineries on San Francisco bay to the docks on the bay for export. The sugar is hauled almost exclusively by special barges and steamer, one of the barges being shown in the accompanying photograph. This barge carries a portable electrically operated conveyor which is used in helping the stevedores up the gang plank when the tide is low. In fact, the conveyor is really a part of the gang plank, and consists of an endless chain with special lugs which engage the axle of the hand trucks, boosting the truck up the plank to the dock. Metal aprons at the top and bottom of the plank give easy access to and from the plank for the hand trucks.

When not in use, the gang plank and chain conveyor is carried on supports at one end of the barge as shown in the other photograph. It is transferred between the deck and the supports by a heavy boom which is operated by a gasoline engine driven drum and cable. This gasoline engine also drives the generator that furnishes the electric current for operating the electric motor on the chain conveyor. Current is supplied to the motor by means of an armored cable which is plugged in at the gang plank. The motor is concealed within the gang plank and is connected to the chain conveyor by chain drive. By this method, one man can deliver a load of 500 pounds from the deck of the barge to the dock, with little effort.

The steam trawlers FOAM and SPRAY recently sailed from the Tebo Yacht Basin, Brooklyn, with a party of 60 men, including three famous divers, to seek the $2,000,000 treasure on board the steamship MERIDA, which was rammed and sunk by the ADMIRAL FARRAGUT off Cape Charles, Va., on May 12, 1911. The treasure consists of 21 tons of bar silver, kegs of gold coin, valuable jewels, all of which was shipped from Mexico at the time of the Madero revolt.

Announce Winning Titles in Gyro Contest

The contest of the Sperry Gyroscope Co., Brooklyn, N. Y., which called for a title for a picture showing the company's gyropilot or automatic steering device in control of the wheel with a phantom of the traditional quartermaster standing at the wheel, opened June 1 and closed Aug. 31. This contest was limited to seagoing personnel of the merchant service and navies of the world, and seagoing personnel temporarily on land duty such as port captains, marine superintendents, etc., which included the personnel of the Great Lakes. It created a great deal of interest.

Contributions were received from all over the world, and the following are the winning titles and the contestants as selected by the judges:

First prize, $100.00—"A Fading Phantom—An Accurate Reality," Master F. B. Parsons, steamer HARRY COULBY, Great Lakes Steamship Co., Cleveland.

Second prize, $50.00—"With Sperry Steering, He's Disappearing," Capt. William R. Leith, Barge "C," Standard Oil Co., (Indiana), Whiting, Ind.

Third prize, $25.00—"Real Iron Men Have Come Again," Chief Mate Walter G. Hodgins, steamer NORFOLK, Coastwise Transportation Corp., Boston.

The next five won prizes of $5 each:

"The Human Equation Eliminated," Everett D. Saunders, Third Mate, steamer SELWYN EDDY, Castner, Curran & Bullitt, Norfolk, Va.

"Metal Mike And Vanishing Jack," Master Robert E. Hudgins, steamer BYLAYAL, Pocahontas Steamship Co., New York.

"Quartermasters Present And Past," C. M. Christensen, Second Officer, steamer MARTINIQUE, Colombian Line, New York.

"Modern Mariner Versus Ancient Mariner," Gordon B. Rabbitts, radio operator, Standard Oil Co., (New Jersey), New York.

"Metal Supersedes Mettle," Lieut. Kenneth L. Coontz, U. S. S. CORRY, United States navy, New York.

The judges in this contest were T. H. Possbottom, general manager of the United States Lines, New York; J. L. Luckenbach, vice president of the Luckenbach Steamship Co., New York, and Capt. A. M. Chalmers, assistant marine superintendent of the Cunard Co. who acted for Capt. D. S. Miller, marine superintendent of the Cunard line who was ill at the time. All contestants received a brochure from the Sperry Gyroscope Co. covering the complete theory of the gyro-compass.

Andrew W. Preston, United Fruit Co. Head, Dies

Andrew W. Preston, founder, and president of the United Fruit Co. since its organization in 1899, died on Sept. 26, 1924, at his summer home in Swampscott, Mass. He was in his seventy-ninth year, and had been ill, though not seriously, since last February. Mr. Preston built up a very large business by popularizing the use of bananas in this country. The result of his enterprise was the organization of the United Fruit Co., which now handles the greater part of the tropical fruit trade of the country. In conjunction with the fruit company, the United Fruit Steamship Co. was built up into one of the country's largest steamship fleets. Mr. Preston was born in Beverly, Mass., June 29, 1846. Besides his connection with the United Fruit Co., Mr. Preston was also head of a number of subsidiary corporations, railroads, sugar companies and fruit growers and dispatchers. He was a director of the First National bank of Boston and the National bank of Cuba.

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Designs Portable Arc Welding Equipment

The Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., has recently designed a compact, entirely self-contained, single-operated, 200-ampere arc welding apparatus which is available in either the stationary or portable form.

The generator will deliver 300 amperes on intermittent work. Any welding current from 60 to 300 amperes may be obtained by operating the rheostat handle which is conveniently located outside the control cabinet which is mounted on top of the generator. The 61 rheostat resistance steps enable the operator to obtain close current control if desired.

If an extremely high current is desired, the generators of several machines may be operated in parallel. The generator is designed to inherently stabilize the arc, thereby overcoming instantaneously any resistance fluctuations in the arc circuit, and, at the same time, eliminating the necessity for relays, solenoid controlled resistors, etc. Because of the special design of the generator, the operator can readily strike and maintain the arc, obtaining the necessary penetration and fusion for good welding. Any of the commercial sizes of metallic electrodes from 1/16 inch to ¼ inch in diameter may be used.

The generator and driving motor are mounted on a common shaft to which the exciter is coupled by means of a special flexible coupling. Ball bearings are used throughout to eliminate the leakage of oil when operated on inclined positions.

The driving motor is the company's standard construction and may be either a direct current or an alternating current type squirrel cage motor, depending upon the character of the supply service. Alternating current driving motors may be used on 220 and 440 volt supply circuits by simply rearranging the lead connections.

Alternating current motors are started by connecting them directly to the line through a safety switch. Direct current motors are started by means of a starting rheostat. In both cases, all the operating mechanism except the handle is within the control cabinet, eliminating the danger of contact with live parts.

An ammeter and voltmeter, if desired, are mounted on the cabinet where they are readily observed by the operator as he adjusts the rheostat for current control.

The rugged construction of the unit makes it particularly adapted to marine shops, and such places where welding equipment receives rough usage. The truck is sturdy and is equipped with roller bearing wheels so that it can easily be hauled by one man.

Order Oil-Electric Drive for Tanker

The Staten Island Shipbuilding Co., New York, will convert the tanker J. W. VAN DYKE to the oil engine-electric drive. This tanker, formerly the ALLENTOWN was purchased from the shipping board and renamed. This vessel has an overall length of 385 feet and a deadweight of approximately 7500 tons. Three 6-cylinder, 840 horsepower Ingersoll-Rand type oil engines, each direct-connected to a 250 volt, direct-current generator, and a 2300 horsepower 750 volt direct-current motor will constitute the new propelling machinery. The three generators and the 2300 horsepower propelling motor, of the double armature type, will be furnished by the Westinghouse Electric & Mfg. Co.

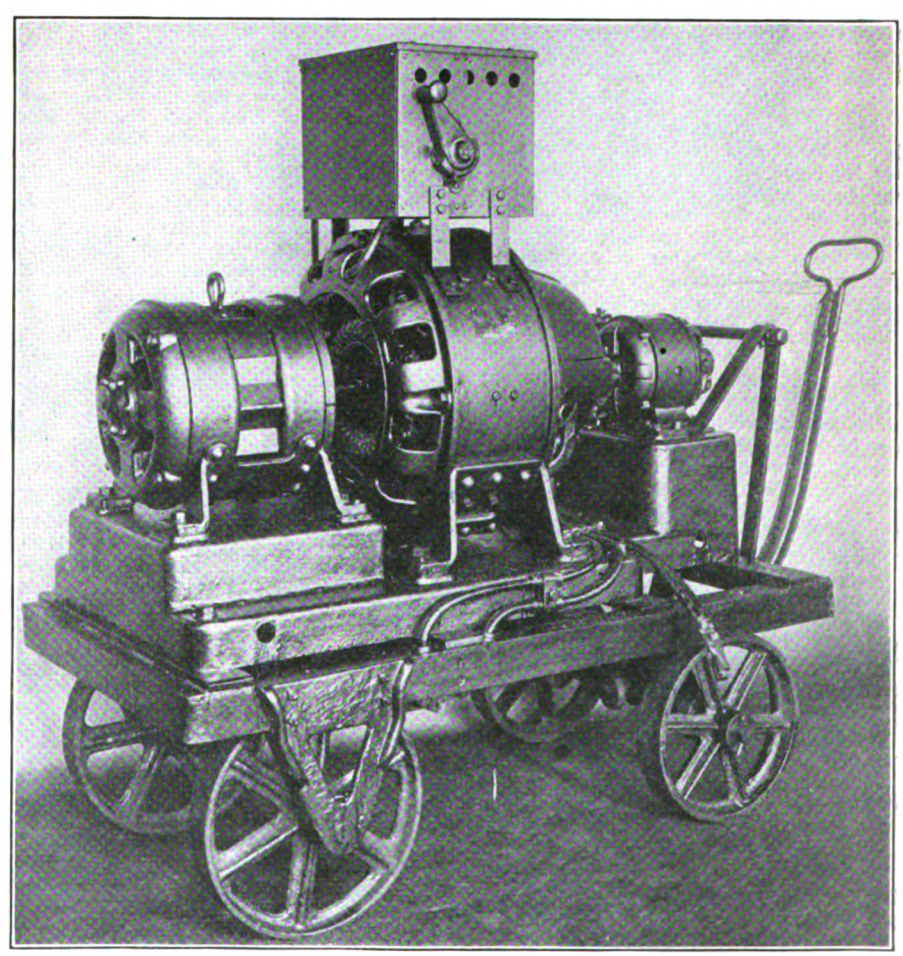
When converted, the J. W. VAN DYKE will have a cargo space of approximately 60,600 barrels. The bunker capacity will be approximately 4300 barrels of fuel oil, enough for 53 days.

Will Build German Type Oil Engine

The Superior Gas Engine Co., Springfield, O., has bought the Otto Engine Works, Philadelphia. Arrangement also has been made with the Deutz Motorenfabrik, Cologne, Germany, to take over the American rights to that company's oil engine and also its gas producer. The arrangement covers the oil engine rights both in this country and Canada, and in both the locomotive and marine types. Under this new development, the Superior Gas Engine Co. is beginning construction of a Deutz type engine for its own use. Entry into the stationary and marine fields will be made later. P. J. Showlin is president of the company.

The Diamond Power Specialty Corp., Detroit, announces the appointment of the Tate Engineering Co., 17 South Gay street, Baltimore, as its marine representative in Baltimore for the sale of Diamond type soot blowers.

W. B. WHEELER, general passenger agent of the United Fruit Co., Boston, has assumed all duties of the former passenger traffic manager, W. M. LOWRIE, deceased.



PORTABLE ARC WELDING EQUIPMENT

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Late Decisions in Maritime Law

Legal Tips for Shipowners and Officers

Specially Compiled for Marine Review
By Harry Bowne Skillman
Attorney at Law

SECTION 879 of Greater New York charter, prohibiting vessels from lying at the end of any pier on the North or East river, except at their own risk of injury caused by any vessel entering or leaving an adjoining slip, does not prevent recovery in such case, where the vessel so lying was not chargeable with fault contributing to the collision; and a barge, lying at the end of a pier when she was struck by another barge in tow of a tug entering the adjoining slip, was entitled to recover from the tug for the collision, where she did not extend beyond the side of the pier, nor obstruct the entrance to the slip by vessels properly navigated.—J. W. KITTRELL, 290 *Federal Reporter* 404.

* * *

A drydock company, having possession of a tug on which it had made repairs, by electing to proceed in admiralty to enforce its maritime lien, waives any right to priority it may have under its common-law possessory lien, and its priority rights must be determined by whatever rule the court may apply as between maritime lienors.—INTERSTATE No. 2, 290 *Federal Reporter* 1015.

* * *

Although a transfer tug was within her right when a river was clear to put her head against a rack or float and operate her engine at full speed, she was bound to exercise care and not interfere unnecessarily with navigation and no such right exists when a tug with a tow is passing, because it endangers the safety of a passing vessel.—CAROLINE M. WADE, 290 *Federal Reporter* 607.

* * *

The fact that a barge, which was seaworthy when delivered, sank while in possession of the charterer, and could not be returned by it in good condition, subject to ordinary wear and tear, establishes a *prima facie* case of fault, and places on the charterer the duty of rebutting the *prima facie case*—that is, to explain the situation, it was decided in the case of C. F. Harms Co. v. Turner Construction Co., 290 *Federal Reporter* 612; but the charterer was not required to show, it was said, how the accident happened, as the only way of meeting the *prima facie* case against it.

* * *

It appeared, in the case of JUNGSHOVED, 290 *Federal Reporter* 733, that a certain boat was tendered as suitable to carry the load for which her size fitted her, and under less than that load, in smooth water and calm weather, she sank; in the picturesque phrase of the waterfront, "she just faded away" without explanation, then or since. This, said the court, raises a presumption of unseaworthiness. It was further said that the hiring of a lighter for storage of cargo in a harbor, pending its landing, carries the implied warranty of seaworthiness for the purposes of the hiring.

* * *

A stevedore's services are maritime in nature, and a court of admiralty has jurisdiction of a suit by stevedore against his employer for injuries received while working on board a vessel.—CANADIAN FARMER, 290 *Federal Reporter* 601.

* * *

Where the marshal, in conducting the sale of a vessel, thought only one bid had been made, and knocked the vessel down to that bidder, whereas another bidder had made a bid of the same amount and claimed the right to the vessel, it was proper for him to put the vessel up for resale again immediately, and to accept higher bids therefor, which conformed to the practice of the state and resulted in the sale of the vessel for more than the former bid.—WEST IRMO, 290 *Federal Reporter* 796.

* * *

The master of a vessel has authority to disrate a seaman for incompetency or other adequate cause, held the court in the case of Butler v. Pacific Mail Steamship Co., 290 *Federal Reporter* 806. "It is contended," it was said, "that disrating is an advocation of the contract of employment, and this is no doubt true. If the disrating occurs at sea the seaman disrated may claim his discharge as soon as the vessel reaches port, and if the disrating occurs in port he may claim his discharge forthwith, and is not bound to accept the new position. In other words, it is optional with the seaman whether he will accept the new position, or insist upon his discharge, but when that election is once made it is binding upon him."

* * *

It is the general understanding in this country that damages for detention are not recoverable in collision cases without proof of actual pecuniary loss occasioned thereby.—NANTASKET, 290 *Federal Reporter* 813.

* * *

A tug, which with a number of others had been lying for several days in port on account of weather conditions, was negligent in leaving on a 12-hour run with a tow of four barges in the face of a falling barometer and other indications of storm, which kept the other tugs with one exception in port, and further negligent in not returning or seeking refuge when a short distance out the weather became more threatening, which negligence rendered her liable for injuries to the barges, which were without motive power, by stranding and collision when they went adrift from parting of their lines.—BENJAMIN H. WHORFORD, 290 *Federal Reporter* 816.

* * *

There are three rules in admiralty, it was said in the case of INTERSTATE No. 1, 290 *Federal Reporter* 926, respecting priority of liens of the same class: (1) In the case of vessels engaged in commerce on the ocean, the voyage rule is applied, and liens for necessaries furnished on the last voyage rank similar liens for prior voyages, although in Massachusetts and Connecticut the calendar year has been adopted in the case of coastwise vessels; (2) in the case of vessels engaged in commerce on the Great Lakes and canals the season rule applies. Priorities of the last season rank similar liens for a prior season, which is practically equivalent to classifying them by the year; (3) in the case of harbor vessels on the Atlantic coast claims less than 40 days old rank older ones. In the western district of the state of Washington, a period of 90 days, instead of 40, is allowed in the case of Puget sound tugs and vessels making daily or weekly trips.

* * *

The master of a vessel, being the agent of the owners' agents, in respect to the possession and general management of the vessel, his knowledge that she was on hire was imputable to them.—Suzuki v. National Surety Co., 290 *Federal Reporter* 942.

* * *

Where the master of a tug having in tow a barge selected as the berth of such barge a position adjoining three other boats, and made the barge fast to the outside boat, it was his duty to see that the lines between the inside boats were sufficient and proper to hold her in the berth he selected, and, if in doubt, to have made her fast by proper lines to the bulkhead, where the situation was such that, though the tide was flood and the weather clear, and not windy, the master of the tug must have known that with the change of tide the barge would be exposed to its full force, it appearing that but three feet of her beam was within the lines of the piers.—MARY ETHEL, 290 *Federal Reporter* 458.

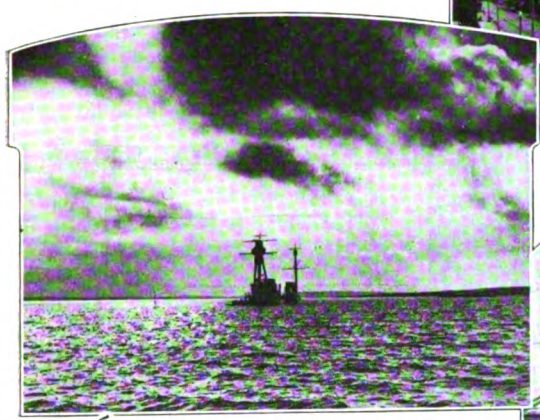
* * *

A charterer, although not an insurer of the chartered scow under its charter, was liable for its own negligence or that of any person to whom it entrusted the boat, and where the scow was injured by being placed in an unsafe berth for unloading by the consignee, the consignee and his agent were secondarily liable and the charterer primarily liable, for such injury.—Donovan v. Frederick Starr Contracting Co., 290 *Federal Reporter* 501.

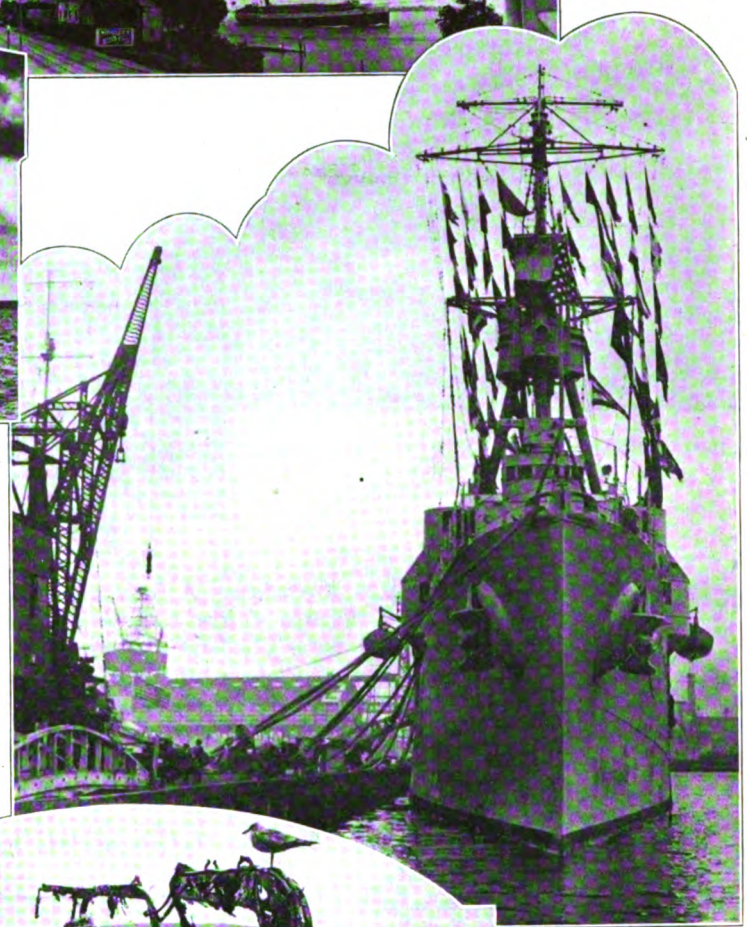
Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Photographs from Far and Near

Marine City, the sailor town of the lakes

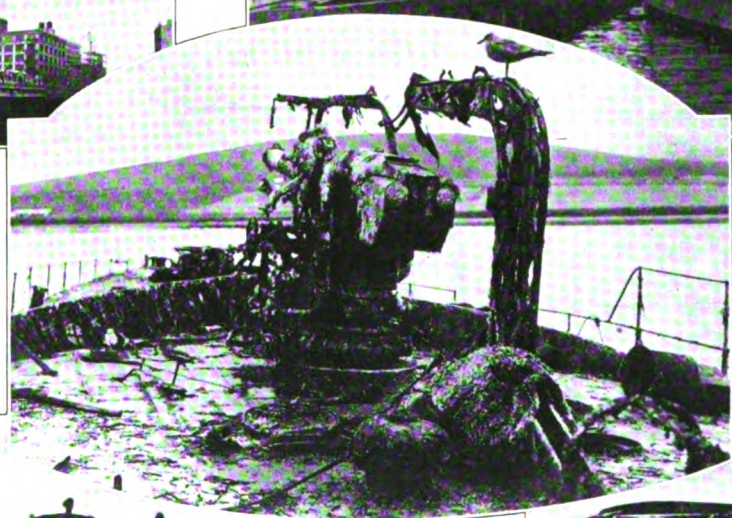


German warship Hindenburg, which has stood sentinel over her sunken comrades at Scapa Flow, will be raised



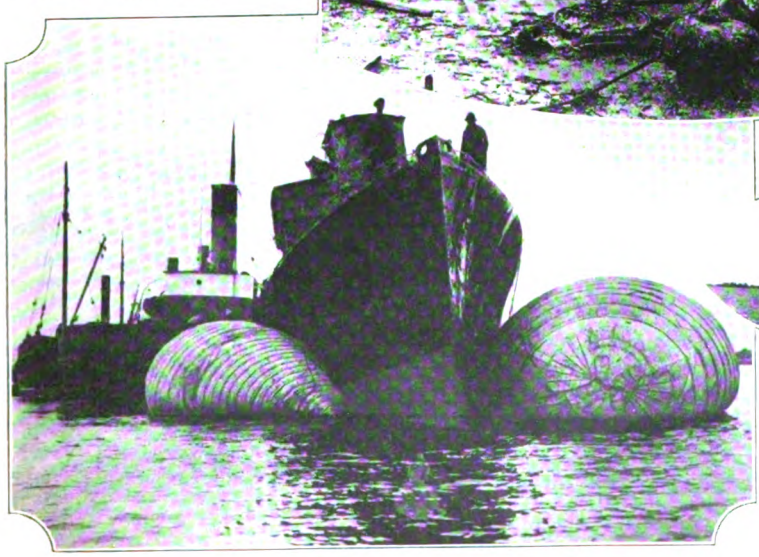
Steamer Illinois, one of the 12 ships in fleet formed by merging the Goodrich and Graham & Morton lines on Lake Michigan.

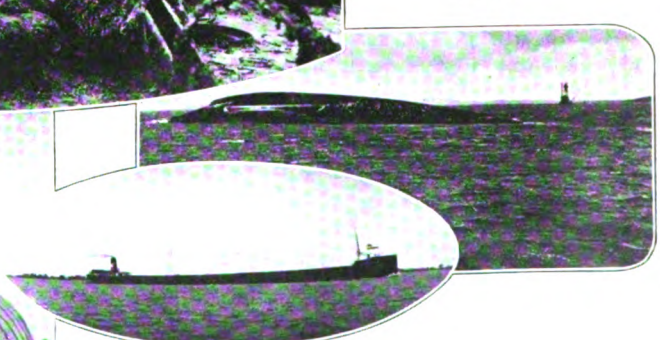
Private firms are raising the sunken German fleet at Scapa Flow. Inflating these balloons brought up this destroyer. At right, forward deck after five years' immersion.



Scout cruiser Marblehead has just been completed

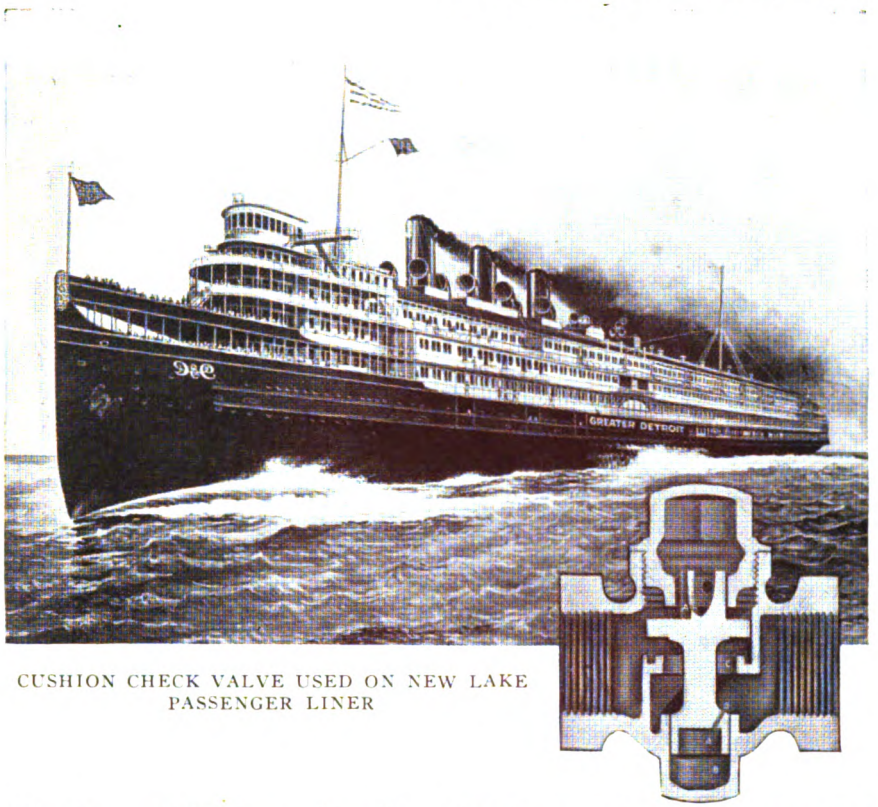
Cruiser Seydlitz at Scapa Flow with the Hindenburg in the distance





Great Lakes ore carrier James MacNaughton downbound on the St. Clair river

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



CUSHION CHECK VALVE USED ON NEW LAKE PASSENGER LINER

Design of Valves Used on Lake Liners

Included in the boiler room equipment of the new lake passenger liners GREATER DETROIT and GREATER BUFFALO are two types of valves whose basic design has stool the test of more than 30 years of marine service.

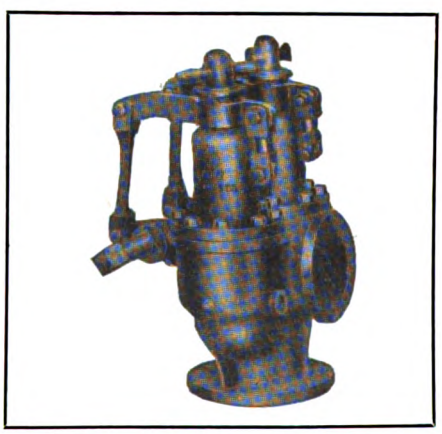
The original principle of construction of the Scott type duplex pop safety valves has been retained with necessary modifications in weight and material to meet increasingly higher pressures. They have a maximum discharge of steam due to the seat construction and the long springs used. The long spring gives the valve great flexibility and over capacity, and allows for great compression should the valve be crowded. These safety valves were installed in a large number of the boilers used on vessels built during the war.

The outstanding advantages claimed for the Scott type duplex pop safety valve are:

The metal used for the body is bronze of 85 per cent copper, 5 per cent tin, 5 per cent lead and 5 per cent zinc. The disk and seat are made of hard bronze. The spring is much longer than is generally used. The long spring makes the valve more flexible and allows a higher lift. These extra long springs place no limit to which the disk will rise in extreme cases and the valve is flexible under all conditions. Discharge requirements are fully met.

They conform to the American Society of Mechanical Engineers standards throughout. A free flow of steam is allowed as the construction of the valve gives it a large capacity. Every fraction of an inch lift adds to the capacity, as the area between the disk and the huddling ring is increased as the disk rises, and the rising movement is unrestricted, owing to the use of the long spring.

The Flower type cushion check valve



DUPLEX POP SAFETY VALVE

was originally designed for marine work, and is particularly adapted for extremely hard service. Pressures around 300 pounds, present the problem of correct cushioning in check valves which the manufacturers of this valve worked to solve.

The cushioning effect obtained by the dash pots both top and bottom of the disk, makes the valve quiet in operation, and what is most important in marine service, the cushioning gives the valves long life, on account of the easy seating of the disks. The dash pots also act as guides for the disk, preventing it from cocking or tilting, thus insuring a perfect seat.

This valve is made of bronze in sizes from ½ inch to 3 inches, to handle pressures to 150 pounds, and is built extra heavy to handle pressures up to 250 pounds. It is made in extra heavy iron sizes from 2½ to 6 inches, to stand pressures up to 250 pounds.

How Valve Operates

The grade of bronze used is 85 per cent copper, 5 per cent tin, 5 per cent lead and 5 per cent zinc. These valves are all made with dash pot in which a piston operates forming a cushion on water, steam or fluid, with a small outlet to let the water in on the rising or lifting of the valve, and to allow a portion of the water out on the downward or drop motion of the valve. Sufficient liquid remains in the dash pot to form a cushion for the valve so that the valve will not strike heavily on the seat. The small opening prevents it from striking on the lift of the valve on top by the suction of water under the piston in the dash pot.

A substantial square nut on the cap provides a good grip with a wrench in case the valve is to be taken apart. By removing the cap, the disk can be reground readily by inserting a piece of wood in the top dash pot for a handle. The bridge wall is heavy and lends strength to the entire body of the valve.

Practically all of the Emergency Fleet vessels constructed on the Great Lakes during the war were equipped with this type of cushion check valves.

Both of the above described valves are manufactured by the Scott Valve Mfg. Co., Detroit.

Marine Congress Will Meet Nov. 12

The American Marine congress will hold its second annual fall meeting at the Waldorf Astoria hotel, New York, on Nov. 12. This organization, which is conducted under the auspices of the American Marine association, met last year for the first time and attracted a large and representative group interested in all phases of the marine problem of the country. Several speakers of national prominence will address this year's meeting.

On the night of Nov. 12, in the same hotel, the American Marine association will hold a banquet. Frank J. Shipman, president of the association, has provided an interesting program for this banquet.

Generated on 2024-07-26 06:18 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Oil Burners Rank First in Panama Trade

Of vessels passing through the Panama canal during the past fiscal year 66 per cent burned oil, 28.4 per cent burned coal while 4.8 per cent were motor vessels. In totals, 5230 ships passed through the canal of which 3452 burned oil, 1487 coal, 255 were motor vessels and 36 were sailing vessels, barges, tugs etc. Vessels burning either oil or coal are classed as oil burners.

Motor vessels have not held their own in Panama canal trade. In the calendar year of 1922, motor vessels accounted for 161 or 5.3 per cent of the total of 2997 ships using the canal. In the past fiscal year, motor vessels accounted for 255 or 4.8 per cent of the 5230 vesels using the canal. The gain in total ships was nearly 75 per cent. The motor vessel gain was only 58 per cent.

Constructed for the navy at the Puget Sound navy yard, the repair ship MEDUSA, 9960 tons displacement, was placed in commission Sept. 18, relieving the repair ship PROMETHEUS which has been decommissioned. The MEDUSA is the last word as a floating machine shop and will be used to make repairs at sea.

Orders Condenser Tubes for Argentine Warships

The contract for the complete reconditioning and conversion to oil burners of the Argentine battleships RIVADAVIA and MORENO, awarded to the Fore River, Mass., plant of the Bethlehem Shipbuilding Corp., Ltd., calls for retubing the condensers.

As a result, an order for 46,000 admiralty condenser tubes, 5/8 inch, 16 B. W. G., weighing 155,000 pounds, has been received by the Bridgeport Brass Co., Bridgeport, Conn. About 15 months will be required to complete all the work proposed on the two battleships.

Ocean Freight Rates

Per 100 Pounds Unless Otherwise Stated

Quotations Corrected to Oct. 21, 1924, on Future Loadings

NOTE: FREIGHT RATES STEADY WITH MARKED INCREASE FOR GRAIN AND FLOUR

New York to	Grain	Provisions	Cotton (H. D.)	Flour	General cargo cu. ft.	General cargo 100 lbs.	††Finished steel	REMARKS Freight Offered
Liverpool	3s 6d‡	$0.50	$0.35	$0.21	$0.40	$0.75	$7.00T	Good
London	3s 6d‡	0.50	0.30	0.22	0.40	0.75	7.00T	Very Good
Christiania	$0.24	0.45	0.50	0.27	0.42½	0.85	8.00T	Good
Copenhagen	0.24	0.45	0.40	0.26	0.42½	0.85	8.00T	Very Good
Hamburg	0.17	0.35	0.35	0.24	0.37½	0.75	8.00T	Very Good
Bremen	0.18	0.35	0.45	0.26	0.37½	0.75	8.00T	Very Good
Rotterdam and Amsterdam	0.17	0.32½	0.40	0.24	0.35	0.70	7.50T	Good
Antwerp	0.14 to 0.16	0.32½	0.35	0.22	0.35	0.70	7.00T	Improved
Havre	0.18 to 0.19	0.50	0.30	0.27½	0.40	0.75	8.00T	Dull
Bordeaux	0.18 to 0.19	0.50	0.30	0.27½	0.40	0.75	8.00T	Dull
Barcelona	0.20 to 0.25	12.00T	0.30	10.00T	—12.00T—		10.00T	Fair
Lisbon	0.20	0.65	0.40	7.00T	—20.00T—		7.00T	Fair
Marseilles	0.20	0.55	0.50	5.60T	—20.00T—		5.00T	Fair
Genoa	0.20	0.50	0.40	0.27	0.40	0.80	6.00T	Good
Naples	0.20	0.50	0.40	0.27	0.40	0.80	6.00T	Good
Constantinople	0.25	17.00T	0.75	0.32½	—20.00T—		9.00T	Improved
Alexandria	None	17.00T	0.75	0.32½	—20.00T—		9.00T	Steady
Algiers	0.22	0.75	0.75	0.40	—20.00T—		7.00T	Fair
Dakar	.....	14.50T	.....	12.00T	—20.00T—		10.00T	Good
Capetown	12.00T	12.00T	.....	10.00T	—12.00T—		9.00T	Good
Buenos Aires	.....	18.00 to 20.00T	.....	.....	18.00 to 20.00T†		8.00 to 8.80T	Very Good
Rio de Janeiro	.....	19.00 to 21.00T	.....	7.00 to 7.70T	19.00 to 21.00T†		6.00 to 6.60T†	Very Good
Pernambuco	.....	22.00T	.....	9.00T	—22.00T—†		8.60T†	Fair
Havana	0 22½ to 0.27½*	0.42½*	.....	0.22½*	0.54*	1.08*	0.20*	Good
Vera Cruz	0.25	0.40	0.45	0.25	0.52½	1.05	0.30 to 0.35	Fair
Valparaiso	.....	1.07	.....	0.70	0.45	0.80	10.00T	Fair
San Francisco	.....	0.40 to 0.70	.....	0.50 to 1.10	....	2.50	0.55 to 1.00	Good
Sydney	.....	18.00T	2.50	18.00T	18.00-24.00T		9.00-12.00T	Fair
Calcutta	.....	16.00T	0.60	12.00T	—16.00T—		10.00T	Fair

T—Ton. ‡Per quarter of 480 lbs. †Landed. ††Heavy products limited in length. *Extra charge for wharfage.

From North Pacific Ports to	Lumber Per m. ft.
San Francisco	$5.00
South California	5.50 to 6.00
Hawaiian Islands	9.50 to 10.50
New Zealand	11.00 to 13.00
Sydney	11.00 to 13.00
Melbourne-Adelaide	11.50 to 13.50
Oriental Ports	7.00 to 8.50
Oriental Ports (logs)	10.00 to 11.00
Peru-Chile	12.00 to 14.00
South Africa	17.50 to 19.00
Cuba	11.00 to 12.00
United Kingdom	80s to 90s
United Kingdom (ties)	70s to 80s
Baltimore-Boston range	$11.50 to 12.50
Baltimore-Boston range. (ties)	Not quoted
Buenos Aires	14.00
Flour and Wheat	
Japan (net ton)	$ 3.75 to 4.00
U. K. and Continent (gross ton)	37s 6d to 40s

Principal Rates To and From United Kingdom

	s	d		s	d
Grain, River Plate to United Kingdom	26	0	Pig iron, United Kingdom to New York or Philadelphia	15	0
Coal, South Wales to Near East	14	0	Iron ore, Bilbao to Middlesbrough	6	4
Coal, United Kingdom to Buenos Aires	13	6	Iron ore, North Africa to Philadelphia	7	0
Manganese Ore, Poti to Philadelphia	$4.00				

Bunker Prices

At New York

	Coal alongside per ton	Fuel oil alongside per barrel	Diesel oil alongside per gallon
Oct. 11	$5.25@6.85	$1.51½	4.00@4.50c
Jan. 9, 1924	5.25@6.50	1.41½	4.63@5.42c
April 8	4.50@6.50	1.66½	5.51c
July 21	4.50@6.25	1.81½	5.16@5.65c
Sept. 22	4.65@6.05	1.81½	4.89@4.92c
Oct. 21	5.00@6.05	1.81½	4.91@5.16c

At Philadelphia

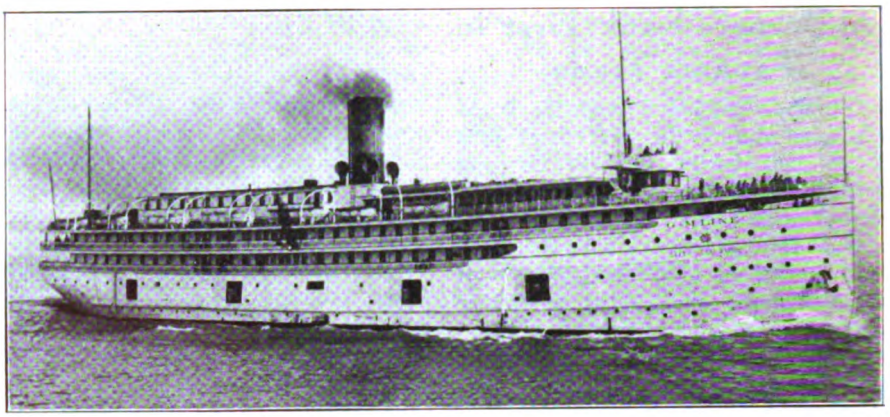
	Coal trim. in bunk. per ton	Fuel oil alongside per barrel	Diesel oil alongside per gallon
Oct. 11	$5.60@6.10	$1.36½@1.51	4.12@4.36c
Jan. 9, 1924	5.50@6.30	1.415	3.86c
April 8	4.85@5.85	1.955	5.41@5.65c
July 21	4.85@6.00	1.945	5.40
Sept. 22	4.85@5.80	1.792@1.815	5.00@5.10c
Oct. 21	5.00@5.80	1.815	4.90c

Other Ports

Boston coal, per ton . $6.73
Boston, oil, f. a. s., per barrel $1.51
Hampton Roads, coal, per ton f.o.b., 4.35@4.75
Cardiff, coal, per ton. 15s 6d
London, coal per ton 23s 0d
Antwerp, coal, per ton 25s 6d

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Consolidate Old Lake Lines



City of Grand Rapids, one of the Lake Michigan passenger liners of the Graham & Morton line, taken over in merger with the Goodrich line

TWO of the oldest passenger lines on the Great Lakes have just consolidated. These are the Goodrich and Graham & Morton lines, both operating on Lake Michigan, and now united under the name of the Goodrich Transit Co. General offices will be in the Goodrich building, south end Michigan boulevard bridge, Chicago. William Alden Smith of the Graham & Morton Co., will be chairman of the board of directors; H. W. Thorp, of the Goodrich line, will be president and general manager; J. Stanley Morton, who has been president of Graham & Morton, will be vice president, with W. J. Thorp, secretary and treasurer of the Goodrich line, acting in that capacity for the new company.

This consolidation brings 12 vessels under the Goodrich flag, ranking the company as one of the largest ever operating passenger ships on the Great Lakes. A financial statement of the Goodrich company a year ago listed its assets at $2,048,914 and a few months later, a Graham & Morton statement showed assets of $1,921,199. Combined assets of the consolidated company are near $5,000,000.

Officials details of the merger are made in this statement by President Thorp:

"The merger will enable us to give shippers and passengers better service. By shifting the units of our fleet of 12 vessels from one point to another as the need arises the maximum amount of service can be rendered at all times.

"This was the thought that culminated in the merger. Our plans at the present are more or less tentative. New schedules will be issued from time to time. In the early part of the year the new organization will be in full swing and the entire schedule revised."

The merger was announced in the following statement from the Goodrich Transit Co.:

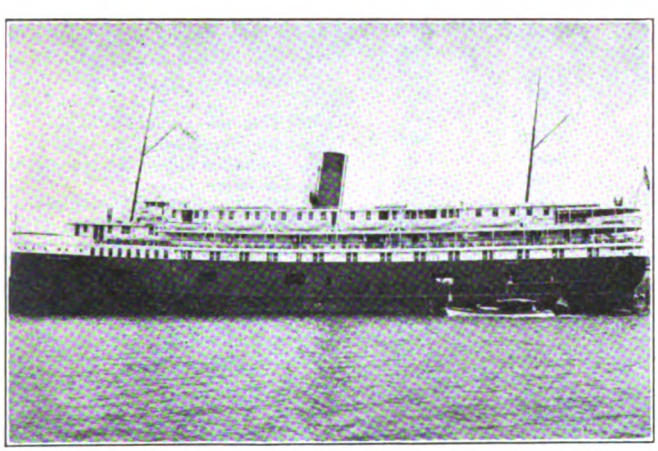
"The consolidation of the two largest and oldest steamship companies operating on the Great Lakes is a matter of great interest to shippers and to the patrons of the Goodrich Transit Co. and the Graham & Morton Transportation Co.

"The consolidation of these two lines makes the company owner and operator of 12 first-class vessels, the largest fleet of passenger and freight vessels on the Great Lakes, and assures to patrons a greater expansion and more important service in the future. After negotiations extending over a period of several months, the owners of the two lines have agreed upon a plan of consolidation which will place these two important properties under one management. Goodrich Transit Co., organized 68 years ago, has been one of the most successful steamship companies which has been operating in the Middle West territory.

Steamships operated by that company consist of the ALABAMA, CHRISTOPHER COLUMBUS, CAROLINA, INDIANA, ARIZONA, ILLINOIS and WISCONSIN; operating between the port of Chicago and Racine, Milwaukee, Sheboygan, Manitowoc, Sturgeon Bay, Green Bay ports, Washington Island, Wis., and Mackinac Island, Mich., on the west shore, and Grand Haven, Muskegon and White Lake, Mich., on the east shore; handling large amounts of freight and several hundred thousand passengers every year.

"This line has been under the immediate direction of H. W. Thorp, president and general manager, and Capt. E. Gunnell, vice president, guided by the board of directors, consisting of Mr. Thorp, Mr. Gunnell, W. J. Thorp, secretary and treasurer; William L. Ross, and J. R. D. Stevenson.

"The consolidated company will take over the immediate direction of the Graham & Morton Transportation Co., which this year celebrates the fiftieth anniversary of its organization and owns the steamships CITY OF GRAND RA-



ALABAMA

INDIANA

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

PIDS, CITY OF HOLLAND, CITY OF SAUGATUCK, CITY OF ST. JOSEPH and CITY OF BENTON HARBOR, operating daily between the port of Chicago and the ports of Holland, Grand Rapids, St. Joseph, Benton Harbor and Saugatuck, Mich., and Michigan City, Ind., hitherto under the immediate management of J. Stanley Morton of Benton Harbor, president and general manager, with a board of directors consisting of William Alden Smith of Grand Rapids, chairman; J. Stanley Morton of Benton Harbor, president and general manager; Nathaniel Robbins of Grand Haven, vice president, and Ferry K. Heath of Grand Rapids, secretary and treasurer.

"Under the plan of consolidation agreed upon, the joint ownership of the reorganized company will extend to both properties, which will continue to give the best possible service between Chicago and all of the ports visited by these ships.

"The personnel of the new management will consist of William Alden Smith, chairman of the board of directors; H. W. Thorp, Chicago, president and general manager; E. Gunnell, Manitowoc, Wis., vice president; J. Stanley Morton, Benton Harbor, Mich., vice president; W. J. Thorp, Chicago, secretary and treasurer; Ferry K. Heath, assistant secretary and treasurer, who, with Nathaniel Robbins of Grand Haven and J. R. D. Stevenson of Chicago, will compose the board of directors.

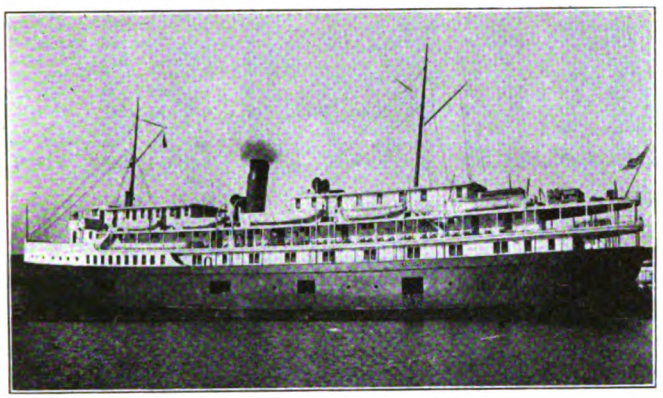
"The business of the consolidated company will be carried on at the general offices and docks of the Goodrich Transit Co., at south end of Michigan avenue bridge, Chicago, with offices at Benton Harbor, Mich., Manitowoc, Wis., and Grand Rapids, Mich. The capital stock of the consolidated company is $1,500,000, and its assets, consisting of floating equipment, terminal properties, etc., aggregate nearly $5,000,000. The consolidated company will be able to render more important service to all of the communities affected, and will operate to the greater advantage of the public."

Convert Cement Ship to Carry Passengers

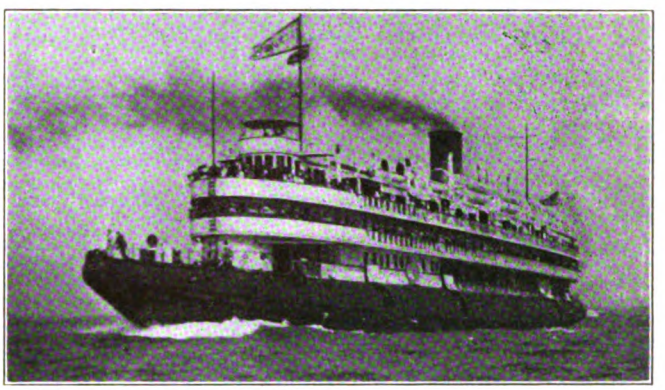
Carroll S. Smith, consulting engineer for the Panama Railroad Steamship Co., 100 Broadway, New York, has recently received bids for an elaborate reconditioning of the ANCON of this line. The work involves building new passenger accommodations to take care of a total of 260 persons, and additional refrigerating space to make a total of 40,000 cubic feet. The ANCON was built at Sparrows Point, Md., in 1902, and with her sister ship, the CRISTOBAL, carried cement used in the construction of the Panama canal. She was rebuilt a few years ago when a change was made from coal to oil burning and the Scotch boilers were renewed.

Though old as ships go, the ANCON in general is particularly suited for the trade and it was decided that since her machinery, hull and boilers are in good shape, it was economically justified to rebuild her at this time. In the proposed reconditioning, the vessel is to be drydocked, to carry out any necessary repairs to the hull and for painting. Three decks are to be added. The shelter deck will be converted for galley arrangements, and officers' and crew accommodations. On the bridge deck will be located, dining room aft, social hall forward and staterooms in between. The promenade deck will have smoking room aft, special rooms and suites forward. Captains' and deck officers' quarters will be located on the boat deck. On this will also be located a dance and observation pavilion and the lifeboats.

Eleven bids were received to do this work. The lowest bid was that of the W. & A. Fletcher Co., for $482,400 and 116 days, while the highest bid was that of New York Shipbuilding Co., for $695,000 and 225 days. From the lowest to the highest based on the same work, the order of the firms bidding follows: W. & A. Fletcher Co., Morse Drydock & Repair Co., Wm. Cramp & Sons Ship & Engine Building Co., Sun Shipbuilding Co., Staten Island Shipbuilding Co., Robins Drydock & Repair Co., Newport News Shipbuilding & Drydock Co., Bethlehem Shipbuilding Corp., Tietjen & Lang and New York Shipbuilding Co.



CAROLINA



CHRISTOPHER COLUMBUS

HARRY W. THORP

President and general manager of the merger which brings together two well known Lake Michigan passenger lines, Graham & Morton and Goodrich

Safety Council Officers

The following officers of the marine section of the National Safety council were elected at the thirteenth annual safety congress at Louisville, Ky., Sept. 29 to Oct. 3: Chairman, W. E. Welch, safety engineer, the Travelers Insurance Co., New York; first vice chairman, C. H. Potter, Potter Transportation Co., New York; second vice chairman, Ellis Knowles, C. D. Mallory & Co., New York; third vice chairman, Capt. H. C. Brennan, Pacific Steamship Co., Seattle; fourth vice chairman, Robert F. Hand, Standard Oil Co., (New Jersey), New York; secretary, John W. Steele, International Freighting Corp., New York.

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Marine Business Statistics Condensed

Record of Traffic at Principal American Ports for Past Year

New York

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	476	2,072,324	483	2,026,172
August	406	1,650,694	479	2,018,621
July	491	1,937,802	525	2,081,663
June	465	1,882,471	495	2,014,598
May	466	1,811,769	520	2,046,833
April	469	1,814,848	504	1,958,579
March	418	1,517,503	459	1,694,905
February	378	1,467,340	445	1,738,675
January	370	1,513,056	434	1,749,172
December, 1923.	383	1,507,914	445	1,658,423
November	418	1,768,503	461	1,976,338
October	462	1,868,446	489	1,993,758
September	428	1,818,981	477	1,978,023

Philadelphia

(Including Chester, Wilmington and the whole Philadelphia port district)

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	82	192,900	66	161,925
August	86	192,777	57	138,280
July	90	195,704	63	149,736
June	94	214,439	75	179,939
May	99	219,934	76	216,237
April	82	195,774	82	232,501
March	80	203,260	66	190,240
February	86	224,309	64	186,373
January	60	151,915	53	155,550
December, 1923.	78	227,055	64	190,644
November	78	198,122	54	135,077
October	93	241,457	64	178,279
September	92	236,293	74	182,700

Boston

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	113	308,352	75	183,286
August	120	293,691	91	176,563
July	139	351,477	99	193,747
June	147	283,982	110	200,026
May	122	260,300	100	219,216
April	100	282,324	63	165,557
March	89	262,438	50	132,862
February	99	307,627	44	133,504
January	84	250,335	47	116,832
December, 1923.	102	285,125	48	130,115
November	91	305,230	60	166,404
October	118	354,296	59	156,940
September	117	307,719	79	185,726

Portland, Me.

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	19	42,910	16	34,813
August	24	52,400	25	54,739
July	18	43,926	22	49,365
June	20	34,631	19	31,911
May	19	33,970	21	40,832
April	17	75,406	21	91,045
March	23	79,648	22	72,517
February	20	67,476	22	69,594
January	22	56,749	23	59,235
December, 1923.	29	104,724	26	100,583
November	25	80,910	24	74,849
October	19	39,456	15	32,471
September	9	22,724	10	25,582

Providence

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	7	20,038	5	21,937
August	7	21,863	5	18,916
July	8	27,747	7	28,730
June	5	21,873	4	10,456
May	10	23,795	4	17,931
April	9	30,592	6	18,959
March	7	33,895	6	23,517
February	10	39,388	8	35,236
January	8	33,215	7	28,927
December, 1923.	12	43,345	7	23,294
November	5	23,038	6	15,700
October	8	30,248	9	24,821
September	9	31,514	12	41,646

Baltimore

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	94	282,861	100	289,324
August	90	278,346	105	329,470
July	106	318,585	106	318,182
June	117	339,212	104	298,765
May	122	369,797	126	378,501
April	112	329,900	106	310,159
March	98	297,869	110	331,665
February	98	310,158	107	335,108
January	85	270,169	99	315,804
December, 1923.	117	365,142	110	354,229
November	90	280,617	91	279,278
October	96	285,871	95	297,566
September	94	292,315	99	297,965

Norfolk and Newport News

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
August, 1924	27	80,338	94	281,959
July	30	78,138	102	301,920
June	36	105,301	83	235,667
May	27	73,846	94	269,752
April	27	82,382	83	234,550
March	19	55,501	81	243,065
February	36	105,233	90	259,085
January	31	96,074	79	249,575
December, 1923.	30	86,444	75	219,325
November	24	65,263	83	239,807
October	18	56,473	65	188,805
September	14	37,823	65	184,646

Savannah

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	34	94,422	36	100,903
August	25	71,138	25	68,527
July	23	56,548	25	64,981
June	29	77,096	25	66,483
May	36	94,106	35	92,503
April	23	63,518	25	67,087
March	31	82,928	34	90,122
February	28	84,961	30	89,599
January	28	88,627	32	96,979
December, 1923.	26	72,541	21	64,973
November	24	75,739	23	67,551
October	31	89,817	33	91,089
September	29	82,569	27	83,689

Key West

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	84	103,588	83	98,063
August	81	93,805	82	94,682
July	94	110,228	91	106,127
June	54	65,770	58	71,102
May	98	110,675	95	104,661
April	92	95,435	85	90,677
March	103	112,577	89	97,276
February	83	83,118	78	84,678
January	69	79,224	70	82,775
December, 1923.	71	88,377	71	91,121
November	80	97,642	85	97,599
October	83	103,328	82	95,506
September	69	77,687	74	84,612

Mobile

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924	80	176,416	71	160,717
August	75	145,597	73	147,681
July	77	161,386	81	166,218
June	90	196,589	73	164,783
May	74	146,668	80	157,655
April	80	158,109	70	133,920
March	83	178,637	84	182,491
February	79	168,182	86	174,517
January	81	158,416	83	159,081
December, 1923.	83	165,163	75	156,579
November	74	148,297	78	145,886
October	68	123,532	60	120,606
September	60	126,005	52	105,247

New Orleans

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924	248	677,631	237	640,301
August	247	645,151	252	676,881
July	241	650,671	250	687,005
June	240	622,326	223	588,554
May	260	703,950	264	696,397
April	249	646,315	262	653,740
March	225	542,040	222	538,642
February	217	604,411	227	610,455
January	217	595,087	220	588,703
December, 1923.	239	632,193	231	634,300
November	216	575,102	218	605,923
October	226	605,211	239	649,791
September	205	548,914	169	444,881

Houston

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
July, 1924	59	77,062	57	288,417
June	65	74,794	72	336,312
May	72	64,937	71	362,350
April	78	76,466	73	337,757
March	88	113,064	87	411,715
February	62	82,601	65	228,178
January	60	55,037	58	267,066
December, 1923.	74	73,876	70	304,359
November	84	83,490	82	350,703
October	75	24,076	70	268,416
September	66	58,704	61	92,664
August	58	43,258	56	211,348
July	48	42,447	48	177,666

Galveston

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	65	189,293	112	350,173
August	61	177,941	87	268,774
July	52	147,279	58	172,847
June	41	133,079	55	170,181
May	58	148,758	69	200,846
April	54	154,343	67	196,610
March	57	176,379	88	287,398
February	55	152,950	80	236,761
January	70	210,110	96	317,105
December, 1923.	71	219,767	106	313,231
November	61	172,824	95	301,148
October	83	209,343	108	334,544
September	64	164,854	100	290,715

Los Angeles

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
August, 1924	96	301,744	76	239,441
July	96	337,767	74	275,993
June	102	307,659	67	258,827
May	91	290,863	75	246,104
April	100	281,343	72	251,237
March	117	272,831	95	232,805
February	135	315,365	102	237,379
January	107	246,203	124	241,859
December, 1923.	165	285,919	103	261,322
November	243	234,357	188	220,733
October	178	236,116	242	194,872
September	88	257,074	110	193,177
August	80	193,400	63	161,380

San Francisco

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	...	225,161	...	220,507
August	...	219,133	...	230,938
July	...	179,671	...	232,262
June	54	188,984	57	196,854
May	63	226,130	62	197,082
April	52	161,682	72	172,155
March	57	190,588	62	210,134
February	53	185,226	59	211,896
January	65	215,020	68	229,206
December, 1923.	63	209,105	68	234,960
November	69	281,081	70	243,152
October	56	205,175	71	249,035
September	43	165,798	63	209,930

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Marine Business Statistics Condensed

Port Traffic Record

Portland, Oreg.

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924.	26	97,923	36	128,205
August	22	78,722	31	118,526
July	11	45,451	22	84,195
June	20	72,801	29	104,309
May	16	58,889	21	72,663
April	26	90,286	33	115,504
March	27	103,891	32	118,406
February	23	85,301	35	130,528
January	12	47,848	25	97,674
December, 1923.	30	99,748	34	120,487
November	30	113,362	34	120,487
October	21	78,191	48	174,275
September	23	86,194	41	138,470

Seattle

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1924	48	193,049	41	168,594
August	35	149,904	41	179,108
July	35	156,626	47	197,330
June	50	211,828	45	175,319
May	46	188,853	43	177,581
April	46	196,591	53	220,763
March	57	236,620	45	191,152
February	48	189,146	54	213,851
January	57	233,002	60	242,577
December, 1923.	48	206,466	52	224,112
November	48	199,115	46	191,022
October	39	184,717	47	200,668
September	32	142,052	40	159,006

Improve Service to Channel Ports

The Hamburg American Line steamers ALBERT BALLIN and DEUTSCHLAND now include Cherbourg as a regular port of call on their trips, both eastbound and westbound, between New York and Hamburg. The regular call at Southampton is maintained.

The following steamers of the combined services of the United American Lines and the Hamburg American line, the RESOLUTE, RELIANCE, ALBERT BALLIN, DEUTSCHLAND and CLEVELAND, now call regularly at Cherbourg and Southampton, enroute between New York and Hamburg.

This is the first time in ten years that German steamers have had free access to French harbors, as previously special permits for each call have been required.

Completing her second successive voyage between London and Seattle, the United States cable steamer DELLWOOD arrived recently at Seattle with 1100 miles of deep sea cable which will form the new line of communication between Ketchikan and Seward, Alaska. The DELLWOOD has since proceeded to northern waters to lay the cable. Earlier in the season, the same steamer laid 1000 miles of new line between Seattle and Ketchikan.

Record of Traffic Through Panama Canal

		Atlantic to Pacific traffic —Panama Canal— No. of ships	Net tonnage	Tons of cargo	Pacific to Atlantic traffic —Panama Canal— No. of ships	Net tonnage	Tons of cargo	Total traffic through canal —Panama Canal— No. of ships	Net tonnage	Tons of cargo
1924										
September	American	101	538,461	217,845	104	577,306	969,667	205	1,115,767	1,187,512
	Foreign	92	451,676	346,610	98	408,770	578,142	190	860,446	924,752
	Totals	193	990,137	564,455	202	986,076	1,547,809	395	1,976,213	2,112,264
August	American	102	575,780	241,567	94	504,003	829,934	196	1,079,783	1,071,507
	Foreign	89	408,637	290,136	87	413,475	596,842	176	822,112	886,978
	Total	191	984,417	531,703	181	917,478	1,426,776	372	1,901,985	1,958,479
July	American	114	603,339	297,625	114	588,560	897,949	228	1,191,899	1,195,574
	Foreign	104	460,039	355,339	90	384,159	546,241	194	844,198	901,580
	Totals	218	1,063,378	652,964	204	972,719	1,444,190	422	2,036,097	2,097,154
June	American	103	546,903	250,651	104	559,615	908,343	207	1,106,518	1,158,994
	Foreign	90	434,266	346,111	80	387,255	517,745	170	821,521	863,856
	Totals	193	981,169	596,762	184	946,870	1,426,088	377	1,928,039	2,022,850
May	American	108	580,686	318,891	112	586,971	1,015,608	220	1,167,657	1,334,499
	Foreign	101	470,938	393,453	96	447,075	626,034	197	918,013	1,019,487
	Totals	209	1,051,624	712,344	208	1,034,046	1,641,642	417	2,085,670	2,353,986
April	American	116	644,601	313,744	116	609,241	982,701	232	1,253,842	1,296,445
	Foreign	86	391,997	321,285	85	407,332	540,991	171	799,329	862,276
	Totals	202	1,036,598	635,029	201	1,016,573	1,523,692	403	2,053,171	2,158,721
March	American	118	622,730	328,370	117	628,038	1,044,524	235	1,250,768	1,372,894
	Foreign	94	432,942	295,178	100	452,369	604,400	194	885,311	899,578
	Totals	212	1,055,672	623,548	217	1,080,407	1,648,924	429	2,136,079	2,272,472
February	American	105	564,637	314,419	115	633,608	1,036,697	220	1,198,245	1,351,116
	Foreign	114	535,277	365,396	84	375,357	527,104	198	910,634	892,500
	Totals	219	1,099,914	679,815	199	1,008,965	1,563,801	418	2,108,879	2,243,616
January	American	132	718,017	335,654	120	645,770	1,066,254	252	1,363,787	1,401,908
	Foreign	121	555,220	346,658	103	481,033	678,766	224	1,036,253	1,025,424
	Totals	253	1,273,237	682,312	223	1,126,803	1,745,020	476	2,400,040	2,427,332
1923										
December	American	143	760,701	316,251	127	708,126	1,115,399	270	1,468,827	1,431,650
	Foreign	135	607,041	418,027	101	440,623	644,957	236	1,047,664	1,062,984
	Totals	278	1,367,742	734,278	228	1,148,749	1,760,356	506	2,516,491	2,494,634
November	American	116	627,115	323,129	128	680,833	1,108,292	244	1,307,948	1,431,421
	Foreign	115	537,180	309,785	77	348,737	477,089	192	885,917	786,874
	Totals	231	1,164,295	632,914	205	1,029,570	1,585,381	436	2,193,865	2,218,295
October	American	132	727,005	286,947	129	687,521	1,141,192	261	1,414,526	1,428,139
	Foreign	97	451,734	335,800	69	273,215	363,628	166	724,949	699,428
	Totals	229	1,178,739	622,747	198	960,736	1,504,820	427	2,139,475	2,127,567
September	American	111	598,331	251,797	126	686,359	1,132,572	237	1,284,690	1,384,369
	Foreign	87	382,506	259,922	89	377,356	524,412	176	759,862	784,334
	Totals	198	980,837	511,719	215	1,063,715	1,656,984	413	2,044,552	2,168,703

Vessels in Ballast

1924										
September	American	47	271,374	0	1	4,107	0	48	275,481	0
	Foreign	17	94,556	0	3	8,954	0	20	103,510	0
	Totals	64	365,930	0	4	13,061	0	68	378,991	0
August	American	47	295,753	0	0	0	0	47	295,753	0
	Foreign	17	75,811	0	0	0	0	17	75,811	0
	Totals	64	371,564	0	0	0	0	64	371,564	0
July	American	51	297,489	0	5	6,747	0	56	304,236	0
	Foreign	21	99,346	0	5	5,084	0	26	104,430	0
	Totals	72	396,835	0	10	11,831	0	82	408,666	0
June	American	48	179,161	0	0	0	0	48	279,161	0
	Foreign	15	81,465	0	2	5,072	0	17	85,537	0
	Totals	63	360,626	0	2	5,072	0	65	365,698	0
May	American	48	277,628	0	1	209	0	49	277,837	0
	Foreign	13	71,134	0	3	4,635	0	16	75,679	0
	Totals	61	348,762	0	4	4,844	0	65	353,516	0
April	American	57	340,185	0	2	5,473	0	59	345,658	0
	Foreign	16	65,372	0	4	9,735	0	20	75,107	0
	Totals	73	405,557	0	6	15,208	0	79	420,765	0
March	American	59	341,151	0	0	0	0	59	341,151	0
	Foreign	22	109,162	0	3	9,295	0	25	118,457	0
	Totals	81	450,313	0	3	9,295	0	84	459,608	0
February	American	47	281,805	0	0	0	0	47	281,805	0
	Foreign	37	138,050	0	4	19,117	0	41	157,167	0
	Totals	84	419,855	0	4	19,117	0	88	438,972	0
January	American	66	396,712	0	0	0	0	66	396,712	0
	Foreign	45	191,380	0	2	9,269	0	47	200,649	0
	Totals	111	588,092	0	2	9,269	0	113	597,361	0
1923										
December	American	75	438,590	0	0	0	0	75	438,590	0
	Foreign	48	192,416	0	3	9,580	0	51	201,996	0
	Totals	123	631,006	0	3	9,580	0	126	640,586	0
November	American	52	307,299	0	2	8,323	0	54	315,622	0
	Foreign	39	162,303	0	2	9,554	0	41	171,857	0
	Totals	91	469,602	0	4	17,877	0	95	487,479	0
October	American	73	443,618	0	2	3,165	0	75	446,783	0
	Foreign	17	77,706	0	2	4,903	0	19	82,609	0
	Totals	90	521,324	0	4	8,068	0	94	529,392	0

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Late Flashes On Marine Disasters

Brief Summaries of Recent Maritime Casualties— A Record of Collisions, Wrecks, Fires and Losses

Name	Date	Nature	Place	Damage Resulting
Aquitania	Sept. 12	Disabled	Quarantine	Lost anchor
Albionic	Sept. 1	Aground	Korsier	Floated
Anamba	Sept. 4	Disabled	Brussels	Mach. dis.
Amager	Sept. 4	Disabled	Great Yarmouth	Leaking
Argo	Sept. 22	Coll.; ashore	Detour	Floated
Ansaldo San Giorgio IV	Sept. 22	Aground	Buenos Aires	Floated
Alex. Maitland	Sept. 27	Collision	Detroit river	11 dam. plts.
Actor	Sept. 26	Collision	Off Fort Strong	Sank
Alaska	Sept. 18	Collision	Antwerp	Not stated
Amsterdam	Sept. 18	Collision	Antwerp	Not stated
Augustyn	Sept. 18	Not stated	Hamburg	Sunk
Aharzada	Sept. 19	Collision	Diamond Harbour	Ab. waterl'e
Augusta W. Snow	Oct. 3	Fire	East Boston	Consider'ble
Aydon	Sept. 9	Ashore	North of Blyth	Not stated
Admiral Schley	Sept. 11	Struck sub. obj.	Portland	Prop. dam.
Aeolus	Sept. 11	Disabled	Hamburg	Bridge dam.
Buillion	Sept. 2	Disabled	Milford Haven	Leaking
Bosporus	Sept. 5	Fire	Needles	Not stated
Bardic	Sept. 4	Disabled	Liverpool	Leaking
Bordeaux Maru	Sept. 18	Collision	Boston	Badly
Beryl M. Curkum	Sept. 19	Capsized	Georges Bank	Sunk
Bedeburn	Oct. 3	Disabled	Brooklyn	To tanks
Besse E.	Sept. 30	Adrift	Jacksonville	Sunk
Biyo Maru	Sept. 24	Ashore	Nagoya	Floated
Border King	Oct. 2	Ashore	Thormanby Is.	Leaking
Belgique	Sept. 11	Fire	Buenos Aires	Not stated
City of Auckland	Sept. 11	Collision	Diamond Harbor	Ab. waterl'e
City of Grand Haven	Sept. 15	Collision	St. Helena Is.	Leaking
Cyrnos	Sept. 3	Struck quay	Marseilles	To bows
Cliffwood	Sept. 4	Fouled quay	Holtenau	Propeller
Chippewa	Sept. 23	Struck boulder	Lake Erie	2 plates
Clearpool	Sept. 18	Disabled	Quebec	Leaking
G. G. Crawford	Oct. 1	Aground	Russell Island	Not stated
W. J. Conners	Oct. 2	Disabled	Neebish Channel	Rud. stock
Cremona	Sept. 23	Not stated	Dunnet Head	Lost dk. car.
Cletus Schneider	Sept. 24	Ashore	Soo River	Slight
Carmen	Sept. 25	Collision	Hull	Dam.
Carla	Sept. 8	Disabled	Cimrishamn	Rud. broken
Conkondo	Sept. 8	Ashore	Island of Hven	Floated
Cayrian	Sept. 12	Disabled	Newhaven	Crankshaft broken
Concordia	Sept. 10	Disabled	Oran	To engine
Challambra	Sept. 15	Stranded	Alaska	Badly
J. S. Dunham	Sept. 16	Hit obstr.	Buffalo	Not stated
Dochra	Sept. 17	Aground	San Francisco	Leaking
Dagmar	Sept. 8	Disabled	Brunsbuttelkoog	Leaking
Dunrobin	Sept. 11	Ashore	Tunas de Zaza	Floated
Dunard	Sept 17	Disabled	Galway	2 blades
Ericsson	Sept. 11	Disabled	Pengrove	Lost steer. wheel
El Lobo	Sept. 4	Disabled	Yokohama	To rudder
Elmsgarth	Sept. 4	Fouled moor.	Kalack	To prop.
Edward Peirce	Sept. 24	Collision	Newport News	Sunk
Elsie Bundle	Sept. 19	Collision	Aberdeen	Slightly
Erato	Sept. 30	Disabled	Charleston	To engine
Ellen	Sept. 10	Disabled	Malmo	Leaking
E. B. Morris	Oct. 7	Touched bot.	Soo river	Leaking
Else	Oct. 3	Ashore	Pensacola	Not stated
Elsbeth Kimme	Sept. 8	Ashore	Hamburg	Floated
Ettrick	Sept. 9	Ashore	Bristol	Not stated
Edith	Sept. 12	Stranded	Steinsport	Lost
Exploradora	Sept. 15	Struck log	Ucayali river	Bot. holed
Forth	Sept. 3	Not stated	Erith Rands	Sunk; raised
Fuji Maru	Sept. 2	Collision	New York	To stem plts
Frank C. Ball	Sept. 19	Struck obstr.	Soo	Slightly
Fordonian	Sept. 22	Struck dock	South Chicago	Bow crush'd
Fellowcraft	Sept. 30	Disabled	Chicago	Leaking
Fox	Sept. 17	Ashore	Yarmouth	Floated
Friesland	Sept. 23	Ashore	Amsterdam	Floated
Francis L. Robbins	Oct. 8	Hit dock	Buffalo	Not stated
Gaelic Prince	Sept. 3	Fire	Singapore	Not stated
Gerda	Sept. 4	Disabled	Rotterdam	Leaking
Glenamoy	Sept. 24	Not stated	Shanghai	Consider'ble
George H. Ingalls	Oct. 11	Collision, fog	Marine City	Slight
General Archinard	Sept. 11	Touched grd.	River Casamance	Leaking
Gwalia	Sept. 12	Disabled	Fredrikshaven	Badly
Glance	Sept. 20	Disabled	Copenhagen	Not stated
Grosvenor	Sept. 23	Gale	Waterford	Seriously
Haugerland	Sept. 2	Disabled storm	Sydney	Flooded
Hookwood	Sept. 1	Disabled	Hamburg	To stern. rud.
Hongisto	Sept. 1	Not stated	Lavernock Cliff	Sunk
Jacob W. Hook	Sept. 18	Aground	Wolf Trap	Leaking
C. Russell Hubbard	Sept. 27	Collision	Detroit river	8 plates
Hazelpark	Sept. 25	Disabled	Shields	To boilers
Hydrus	Sept. 30	Collision	Sandusky	Undam.
Homecliffe	Sept. 19	Fire	Rio Janeiro	Slight
Hartney W	Oct. 7	Disabled	Portland, Me.	Leaking
Horseferry	Sept. 15	Ashore	Wiborg	To bottom

Name	Date	Nature	Place	Damage Resulting
Ida	Sept. 4	Not stated	Belvedere	Sank
Idonza	Sept. 18	Not stated	Port Arthur Canal	Sank
Ivor	Sept. 21	Fire	St. Johns, N.F.	Sank
Isonzo	Sept. 23	Not stated	Sabine Neches Canal	Sank, raised
Jacob W. Hook	Sept. 18	Ashore	Chesapeake	Leaking
John Poulsen	Sept.	Collision	Astoria	Stem. ser.
John W. Ailes	Aug. 28	Ashore	Rocky Island	3 plates
Krusau	Sept. 1	Struck quay	Cuxhaven	Stern dam.
Kennebec	Sept. 3	Disabled	Tynemouth	To mach.
Kasper	Sept. 4	Ashore	South of Lesso	Floated
Kathleen Annie	Sept. 30	Ashore	Kirkwall states	Total wreck
Kullen	Sept. 24	Disabled	Nieuwdiep	Leaking
Kaikoura	Sept. 15	Fire	Wellington	Badly
Kingswood	Sept. 17	Stranded	Beaumont, Tex.	Badly
Kueichow	Sept. 18	Disabled	Shanghai	To rudder tubes
La Felix	Oct. 2	Ashore	Santa Cruz	Total loss
Lake Flatery	Oct. 4	Fire	Makta	To cargo
La Brea	Sept. 22	Hvy. weather	San Francisco	To deck fit.
Margret Dewar	Sept. 3	Stranded	Kildalloig Beach	Full water
Mesna	Sept. 4	Ashore	Hakanfisi Reef	Tot. wreck
Mundelta	Sept. 24	Collision	Newport News	To bow
Montrose	Oct. 3	Disabled	Providence	To boilers
Mairo	Sept. 8	Disabled	Lima	Total loss
Marionga Mar	Sept. 11	Collision	Eleusis Bay	Slight
Moyallon	Sept. 16	Disabled	Fishguard	Leaking
Maigue	Sept. 18	Collision	Liverpool	To prop.
Nueces	Sept. 11	Disabled	Galveston	To boilers
Newton	Sept. 1	Hurricane	New York	Seriously
Norwich City	Sept. 4	Fire	Perim	To hull
Nervier	Sept. 4	Disabled	Rosario	Lost anchor
Norway	Oct. 1	Ashore	Sandusky	Floated
Otto M. Reiss	Sept. 15	Collision	St. Helena Is.	Not dam.
Orari	Sept. 1	Disabled	Colon	Sl. dk. dam.
Oshima Maru	Sept. 4	Not stated	Nekogashiri Rock	Sank
Oosterland	Sept. 11	Disabled	Amsterdam	To deck
Oriflamme	Sept. 25	Disabled	Valentia	Blade broken
W. P. Palmer	Sept. 22	Ashore	Detour	To wheel
W. G. Pollock	Sept. 24	Struck dock	Duluth	Slightly
Prompt	Sept. 19	Collision	Baltic Sea	Leaking
Price McKinney	Sept. 30	Collision	Sandusky	To plates
Prince John	Sept. 8	Disabled	Vancouver	Badly
Port Augusta	Sept. 15	Disabled	Natal	Tank holed
Quachita	Sept. 13	Fire	Mississippi river	Destroyed
Reginald R. Moulton	Sept. 17	Storm	Halifax	Badly
Radnor	Oct. 1	Disabled	Iloilo	To cargo
R. P. Ranney	Oct. 5	Struck obstr.	Lake Erie	2 blades
Rochambeau	Oct. 4	Fire	New York	To cargo
Raymond	Oct. 1	Disabled	Astoria	Leaking
Steckelhoem	Sept. 1	Ashore	Holtenau	Floated
Surat	Sept. 4	Disabled	Singapore	To rudder
Sunbeath	Sept. 4	Aground	Karachi	Leaking
A. E. R. Schneider	Sept. 16	Aground	Point Aux Pins	Leaking
Larnie B. Shaw	Sept. 18	Disabled	Delaware	Leaking
Sagaporack	Sept. 18	Collision	Boston	Damaged
Savannah	Sept. 20	Str. sub. obj.	Brunswick	Blade broke
S. B. Lund	Sept. 10	Grounded	Vera Cruz	Floated
Sakala	Sept. 11	Disabled	River Humber	Hvy. list to starboard
Salvor	Sept. 8	Ashore	Cape Mudge	Floated
Ssea	Sept. 11	Collision	Landskrona	Slight
South American	Sept. 11	Fire	Lake Michigan	Total loss
Southern Pride	Sept. 11	Disabled	Monte Video	To rudder
Sundsborg	Sept. 12	Disabled	Helsingborg	Badly
Tresness	Sept. 3	Aground	Leith	Floated
Tser	Sept. 23	Ashore	Cove Point	Not stated
Teno	Sept. 24	Fire	Brooklyn	Not stated
Wm. H. Taylor	Sept. 28	Fire	Jersey City	Heavy
Thordis	Sept. 19	Struck wall	Gatun Lock	3 plates
Uffe	Sept. 12	Dismasted	Fredrikshaven	To prop.
Venture	Sept. 11	Struck bot.	Skenna River	To prop.
Verdun	Sept. 15	Missing	Not known	Total loss
Voltaman	Sept. 18	Ashore	Addah	Total loss
Wren	Sept. 12	Ashore	Davis Inlet	Total loss
Westmount	Sept. 22	Collision	Detour	1 plate
Wahcondah	Sept. 24	Ashore	Lake Huron	Floated
John Winstead	Sept. 23	Disabled	Delaware	Leaking
West Prospect	Sept. 26	Disabled	Manila	To engine
Wheavale	Sept. 10	Disabled	Falmouth	To boiler
Wayfield	Sept. 11	Disabled	Yarmouth Harbor	To engine
Yrsa	Sept. 18	Disabled	Brunsbuttelkoog	Defec. mach.
York City	Sept. 11	Fire	Durban	Undam.
Zellah	Oct. 11	Collision	Marine City	To up. wks.
Zozan Maru	Sept. 26	Fire	Shimonoseki	Not stated

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

From the Old Log Book

Stray Items About the Great Lakes, Atlantic, Pacific and Gulf Coasts and Inland Rivers from MARINE REVIEW Files of 10, 20, 30 and 40 Years Ago

November, 1884

ONOKO was the largest vessel on the lakes and the 'monster,' as she was called, celebrated her high rank by the remarkable achievement of running from Chicago to Buffalo in 3 days and 15 hours. (She sank only a few years ago near Duluth harbor).

* * *

The Cunarder Umbria, largest vessel afloat with the exception of the Great Eastern, held her trial trip and steamed 30 miles at a speed of 21 nautical miles an hour. It was observed as an item of great interest, that 'the electric light is used.'

* * *

Barge canalin' ain't what it used to be, tells an old boatman. But as he was giving up the trade, he told of a wager by which a young sport took his boat from New York to Buffalo in four days' less time than the trip had ever been made. A fast steamer towed the barge up the Hudson, locomotives pulled it where tracks permitted and in between, the mules were driven at top speed with frequent relays. The young sport spent $1900 *on the trip but won a* $10,000 *bet.*

* * *

Many ports were then active which now rarely figure in Great Lakes news. One issue, for instance (Marine Review was then a weekly) carries correspondence from Mt. Clemens, Hancock, St. Ignace, Watertown, Pentwater, Grand Haven, St. Joseph, Alpena, Kingston and Cheybogan.

November, 1894

THE Great Lakes merchant fleet was the largest of any section of the country, according to the supervising inspector general of steam vessels. A net tonnage of 658,101 was inspected on the lakes, 567,139 on the Atlantic, 150,848 on western rivers, 147,547 on the Pacific and 72,150 on the gulf. More vessels operated on the Atlantic, but the greater size of lake ships made their total tonnage rank first.

* * *

Secretary W. L. Capps (now admiral) general meeting of the Society of Naval Architects and Marine Engineers at New York, Nov. 15. *(The thirty-second meeting will be held this November.) Some of the speakers were Rear Admiral Richard W. Meade, Capt. W. T. Sampson (later Spanish war admiral), Admiral George W. Melville (of Arctic exploration fame), Lewis Nixon, Prof. Cecil H. Peabody and Joseph R. Oldham, naval architect of Cleveland.*

* * *

Frank E. Kirby, famous naval architect, was elected engineer of the Detroit Dry Dock Co. Hugh McMillan was named president.

* * *

Walter M. McFarland, now president of the Society of Naval Architects and Marine Engineers and marine manager of Babcock & Wilcox, delivered a series of lectures on boilers before the Naval War college. He had been secretary to the famous admiral, George W. Melville.

* * *

Records showed that Canada did not build even one steam vessel in 1893 but had turned out 363 sailing ships.

* * *

The liner ST. LOUIS, one of the famous quartette with the ST. PAUL, PHILADELPHIA and NEW YORK, was launched by Cramp's shipyard before a crowd of 30,000. President Grover Cleveland was present and all speakers predicted a new era for American shipbuilding, as she was the largest and most powerful vessel ever built in the western hemisphere. President Cleveland said the need for rebuilding the navy inspired the construction of this ship and urged that we "make our flag a more familiar sight in the ocean carrying trade and thus remind our citizens that a large share of the carrying trade of the world is due to them."

November, 1904

LAKE ship contracts were somewhat more numerous than during 1924. One issue lists contracts between Dan R. Hanna and the American Shipbuilding Co. for two 524-foot freighters, duplicates of those building for G. A. Tomlinson at West Bay City; between the Niagara Transit Co. represented by Harvey L. Brown and W. Mills and the same yard for a 545-foot freighter; between the Anchor line and the Great Lakes Engineering Works for a 5000-ton package freighter. The American company had contracts for 17 ships and the Great Lakes plant for 7.

* * *

The Hawgood fleet on the lakes had the largest average carrying capacity with 6349 *tons per ship. The Tomlinson fleet was second with* 6262 *tons but five new steamers building would bring the average up to* 7276 *tons. The Steel corporation fleet averaged* 4568 *tons per ship and the Mitchell fleet* 5453 *tons.*

* * *

The Great Lakes Engineering Works elected officers, including A. C. Pessano, president and general manager; John R. Russel, secretary and treasurer; Henry Penton, constructing engineer and John A. Ubsdell, superintendent.

* * *

Harry Coulby, now chairman of the Pittsburgh Steamship Co., and head of the Interlake Steamship Co. fleet, was the last person to appear at Cleveland before the Merchant Marine commission which had been named by congress to study the shipping question. It was commented that his address, though purely ex tempore, was "the most convincing heard by the commission."

November, 1914

CONTRACTS were given to the Newport News and New York Shipbuilding yards and to a navy yard for building the battleships, since completed and named CALIFORNIA, MISSISSIPPI and IDAHO.

* * *

The car ferry Henry M. Flagler, built to run from Key West, Fla. to Havana, Cuba, was launched by Cramp's.

* * *

A few war stories begin to appear, including the sinking of the British cruisers ABOUKIR, CRESSY *and* HOGUE; *the successful exploits of the German raider* EMDEN *which was still at large; and the fight between the Cunarder* CARMANIA *and the Hamburg-South American liner* CAP TRAFALGAR, *in which after two hours firing, the latter turned turtle and sank.*

* * *

J. C. Wallace resigned as president of the American Shipbuilding Co. and Edward Smith of Buffalo succeeded him. M. E. Farr was elected vice president. He later became president and has just now resigned that position.

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Business News for the Marine Trade

Gerberviller Steamship, Ltd., Montreal, Que., has been incorporated to build and operate ships and vessels, with $100,000 capital, by Rene Chenevert, Leopold Barry and Max Bernfeld.

Matinock Steam Ship Co., has been incorporated in Dover, Del., to own and operate boats.

Charles D. McAllister Corp., has been formed with $50,000 capital to operate boats, by Patrick J. Dobson, William Shea, and Charles P. Schroette, New York.

Malabar Steamship Co., has been incorporated with $300,000 capital, in Dover, Del., to own and operate steamships.

Victoria Corp., New York, has been incorporated in Wilmington, Del., with F. L. Mettler as attorney, to own and operate boats with $4000 capital.

Muskogee Steamship Co., has been formed in Dover, Del., with $300,000 capital, to own and operate ships.

Ardmore Steamship Co. has been incorporated with $300,000 capital in Dover, Del., to own and operate steamships.

Foam Corp., has been incorporated in Wilmington, Del., to build and operate boats, with headquarters in New York.

East River Stevedoring Corp., New York, has been dissolved.

Spray Corp., New York, has been formed with $4000 capital to own and operate boats.

Steamer Morton, Cayuga Lake, New York, has been incorporated for $10,000 to conduct a navigation business, by H. N. Ogden, E. Gillette, and W. O. Kerr, with Kent, Means & Smith, Buffalo, as attorneys.

Schang Steamship Co., has been incorporated at Wilmington, Del., with $140,000 capital stock.

Soo Boat Works, Ltd., Sault St. Marie, has been incorporated to build skiffs, canoes, vessels and boats of all kinds and appliances, with $40,000 capital. John Munnock, Ernest V. McMillan and Alice Munnock and others are incorporators of the company.

Transatlantic Stevedore Co. of New York, has been incorporated under the New York laws with $10,000 capital.

Brewster & Co., have been incorporated for $100,000 at Wilmington, Del., as importers and exporters.

Prince Rupert Drydock Co. has obtained a contract for repairing the C. G. M. M. Steamer PRINCE JOHN, damaged on the rocks near Prince Rupert, B. C.

Union Steamship Co., British Columbia, has ordered three twin screw steamers, each about 230 feet long from the Coaster Construction Co., Montrose, Scotland. The ships will be in the British Columbia Alaska service.

Andrew Weir & Co., have ordered four twin-screw oil carrying vessels of about 305 feet in length, from Harland & Wolff, Belfast, Scotland.

Vacuum Oil Co., Ltd., London, has ordered an oil carrying steamer 394 feet long from the Greenock Dockyard Co., Ltd.

The East Waterway Dock & Warehouse Co., Seattle, has completed a 250-foot extension to its wharf on Harbor Island.

The New London Ship & Engine Co., Groton, Conn., is building a $200,000 addition to its plant. A yard crane, 105x350 feet will be constructed near the building.

Burmeister & Wain now are constructing a double acting engine for marine purposes. The William Cramp & Sons Ship & Engine Building Co., is the American licensee to build diesel engines of the Burmeister & Wain patents.

Dravo Contracting Co. has received contracts for five sand and gravel barges for the Ohio River Sand Co., Louisville, Ky.

Luling-Destrehan Ferry Co., Inc., New Orleans, has been incorporated with $30,000 capital to conduct a ferryboat business.

Business Changes

Goodrich Transit Co. and the Graham & Morton Line, Great Lakes transportation companies, have consolidated, forming one of the largest mergers ever effected in the history of the Great Lakes. William Alden Smith was elected chairman of the board and Harry Thorp, president. Twelve steamers and $5,000,000 capital, are represented in the new company.

* * *

Control of the Seattle Shipbuilding & Dry Dock Co., Seattle, has been taken over by Otis Cutting, manager of the Lake Union Dry Dock Co. The Seattle company is being dismantled for removal to the Lake Union plant.

* * *

The Baltimore organization of the United American Lines on Nov. 1 was taken over by Dichmann, Wright & Pugh, Inc. who now represent the joint services with the Hamburg-American Line in the Hamburg trade and Houlder, Weir & Boyd in the intercoastal trade. This is an extension of the arrangement by which Dichmann, Wright & Pugh, Inc. were recently appointed agents of the United American Lines at Norfolk Va., and Philadelphia.

* * *

Atlantic, Gulf & Far East Steamship Co., has changed its name to the Atlantic, Gulf & Oriental Steamship Co., with its offices in New York.

* * *

R. R. Row has been made director of sales for the several manufactured products known as Todd specialties, according to an announcement just made by the Todd Shipyards Corp., New York. Mr. Row formerly was president of the firm of Row & Davis. His headquarters will be at 25 Broadway, New York.

Charleston Dry Dock & Machine Co., Charleston, S. C., has been awarded a contract to build a stern wheel towboat for the United States engineering department at Montgomery. The boat will be of steel, 134 feet long.

Tri-City Transportation Co., 11 Water street, Warsaw, Ill., has been incorporated for $4000 to build, own and operate ferry boats, by J. A. White, Joseph Fry, and Irven Meyer.

Planet Steamship Corp., Maine, has designated the secretary of state of New York as representative with 100,000 shares no par value common stock.

New York Maritime Service, New York, has been dissolved.

Ecuadorean American Transportation Co., Wilmington, Del., has been incorporated with $1,100,000 capital, to own and operate steamships between North and South Americas.

Robert Jacob, City Island, N. Y., has been incorporated for $300,000 to conduct a shipbuilding business, by R. and R. Jacob Jr., and B. Randall. D. Caril, New Rochelle, L. I., N. Y., is attorney for the company.

A. Guthrie & Co., Portland, Oreg., has the contract for constructing a steamship terminal for the Oregon-Washington Railway & Navigation Co., 100x900 feet, of frame and corrugated iron, costing approximately $400,000.

The Gibb Instrument Co., Bay City, Mich., manufacturer of electric welding machines and electric heating machines, has started constructing a new plant.

Beaver Transportation Line, New York, has been formed with $5000 capital to conduct a navigation business by F. L. Sargent, W. S. Hill and J. P. Bickerton Jr. P. Baumer, 16 Whitehall street, is attorney for the company.

Waterfront Stevedoring Co., New York, has been incorporated for $20,000 to conduct a freight handling business, by E. S. Blackstone, and B. Cheiker, with J. J. Tashof, 44 Cedar street, as attorney.

Russian-American Line, New York, has reduced its capitalization from $100,000 to $1000.

The A. W. deYoung Boat & Shipbuilding Co., Inc., Alameda, Cal., has been awarded contracts for constructing snag boat for the army engineers near there.

The American Manganese Bronze Co., Philadelphia, has been awarded a contract by the shipping board for $100,000 worth of bronze propeller blades.

J. Coughlan & Sons, Ltd., Vancouver, B. C., was damaged by fire with heavy loss some time ago and no reconstruction has been undertaken.

The port commissioners of Houston, Tex., have awarded contracts to Atlantic, Gulf & Pacific Dredging Co., Scanlan building, that city, for constructing a ship channel.

The dock board of New Orleans has approved plans for constructing wharves for the United Fruit Co., 321 St. Charles street.

Mattaponi River Transportation Co., Walkerton, Va., has been incorporated to own and operate passenger and freight steamers, with H. L. Powell, Stevensville, Va., as president; E. D. Clopton, West Point, Va., as secretary.

The Canadian Prest-Air Ltd., Montreal, Que., has been incorporated with $50,000 capital, to manufacture railway, steamship, automotive transportation and refrigerating machinery, equipment and accessories, by James H. Busg, George R. Drennan and Michael J. O'Brien.

Generated on 2024-07-26 06:19 GMT / https://hdl.handle.net/2027/mdp.39015043584112
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN